



**CERTH**  
CENTRE FOR  
RESEARCH & TECHNOLOGY  
HELLAS



Thessaloniki, 19/05/2017

## **3DMicroGrid: Design, Development and Demonstration of a future-proof active smart MicroGrid system**

*Plenary Meeting - 18-19/05/2017 Greece*

### ***CERTH is contributing to a new evolution in the future smart micro-grid system***

*Thessaloniki:* Experts from leading institutions in Greece, Germany, Spain, Cyprus, Malta, Jordan, Turkey, and Algeria are leading a new evolution in the future smart micro-grid systems. They are meeting at CERTH as part of the activities of the 3DMicroGrid project that is supported by the European Commission through the ERANETMED Initiative Programme. The project aims to facilitate the design, development and demonstration of an active smart micro-grid system to integrate and optimise multiple small to medium sized energy sources and loads.

Dr Dimos Ioannidis, Research Associate at CERTH/ITI said “A demo smart micro-grid system will be built to integrate all energy components for better renewable energy utilisation and carbon footprint reductions while improving the power quality and ensuring economic feasibility.”

He added that “Different power saving strategies will be envisaged in the project including load/demand forecasting, renewable energy generation forecasting, integration with weather sensors, utility grid’s power outage pattern identification, prioritising loads and exercising the option of demand response, identifying the appropriate distributed generator to turn-on, and exercising the option of storage technology utilisation of appropriate size. It is expected that the 3DMicroGrid will provide distinct benefits like energy savings, frequency support, and demand side management.”

Dr Ing. Brian Azzopardi from the Malta College of Arts, Science and Technology (MCAST) added that “the 3DMicroGrid project shall undertake a detailed MCAST campus assessment of existing energy scenarios including energy consumption, possible fuel consumption and generation efficiency, loads and their classification, consumption patterns such as human presence and behavior, power quality, switching between various distributed power sources, and techno-commercial assessment.”

About the 3DMicro-Grid ([www.3dmicrogrid.com](http://www.3dmicrogrid.com)): The 3D-Micro-Grid project is coordinated by the German Jordanian University (Jordan), while its consortium brings together researchers from the Malta College of Arts Science and Technology (Malta), the University of Cyprus (Cyprus), the Center for Research and Technology Hellas (Greece), Abdullah Gul University (Turkey), the University of Seville (Spain), the Ecole Nationale Polytechnique d’Oran (Algeria), as well as three SMEs, the GeoSYS (Malta), the Energynautics (Germany), and Electronic Systems Design LTD (Malta).

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