EU-funded Horizon2020 project eDREAM (enabling new Demand Response Advanced, Market-oriented and secure technologies, solutions and business models, Grant Agreement No. 774478) is coming to an end after more than three years.

eDREAM project envisions a novel blockchain-based demand response decentralised ecosystem to alleviate power grid local network constraints in near real-time caused by the imbalances or optimise nearby energy management.

Thus, eDREAM develops new solutions for **DSOs** and improves decision-making of **Aggregators** and **Energy Retailers** using a new decentralised and community-driven energy ecosystem and fully integrating the micro-grid and VPPs (Virtual Power Plants) to local power disruption network.

During this time, the consortium has been working in close cooperation to develop new demand response technologies and services, more specifically in the fields:

DR Aerial Survey Toolkit
Big data Clustering for Load Profiling and Customer Segmentation
Demand Response Services Optimisation
Interactive visualisation based on graph analytics for Decision Support System
Electricity Consumption / Production Forecasting
Blockchain-based decentralised control & Prize driven flexibility market
P2P Market & Financial Settlement

The eDREAM offering will be made available through three main project assets:

Local flexibility marketplaces – for DSOs and Aggregators
Local P2P (peer-to-peer) marketplaces – for Prosumers and Aggregators
VPP optimisation framework & dynamic coalitions – for Aggregators

The project tools and services are being validated in three different pilots, in Italy, Greece and UK, as it follows:

Use Case 1 – Secure micro-grid environment for participation in blockchain-driven Demand Response programs (Italy)
Use Case 2 – Lab-based validation of technologies and tools (Greece)
Use Case 3 – Integration of smart customers, DERs, Asset Management and Demand Response network planning (UK)

Servelect, one of the eDREAM partners, is an ESCO company (Energy Services Company)

from Cluj-Napoca, Romania.

Servelect has over 16 years of experience in the field and managed to implement energy efficiency projects throughout the country, covering many beneficiaries from different activity sectors: industry, buildings, cities and public authorities, utilities, oil and gas, energy infrastructure operators.

Servelect has relevant experience in energy efficiency and local energy generation, in both industry and buildings, acting as an energy service company that handles the engineering, design, financial analysis, and effective implementation of the projects.

Within the eDREAM project, Servelect contributed to the validation of energy-saving assessment, validating innovative business models and user requirements, use cases, and system specification. The company also coordinated the communication and dissemination activities of the project.

The eDREAM consortium was successfully coordinated by Engineering Ingegneria Informatica and composed of leading European companies from the energy and ICT sector, SME, research institutes, universities, innovative non-profit organisation, public utility, ESCO, engaged in the field of Research, Technology and Innovation.

Source: Energy Industry Review