





Designação do projeto | UNiTED - "Unlocking demand response potential with Next generation innovative optimization Tools Empowering prosumers and Distribution grid benefits"

Código do projeto | POCI-01-0145-FEDER-029803 (PTDC/EEI-EEE/29803/2017)

Objetivo principal | Development of next-generation innovative optimization tools to leverage Demand Response services

Região de intervenção | Norte

Entidade beneficiária | INESC TEC - Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência

Data de aprovação | 27-02--2018 Data de início | 01-06-2018 Data de conclusão | 31-05-2021 Custo total elegível | 239.340,30 Apoio financeiro da União Europeia | FEDER:203.439,26 Apoio financeiro público nacional/regional | 35.901,04

The UNITED project aims to:

- a) Develop disruptive Demand Response solutions based on distributed data analytics and optimization functions to enable full integration of demand-side flexibility in the electricity market, system operation and planning, while fostering innovative business models, making use of new data management and consumer/prosumer involvement approaches;
- b) Develop a variety of innovative Demand Response functionalities that enable Distribution System Operators to plan and operate distribution networks with a high share of Renewable Energy Sources in a stable, secure and economic way. Additionally, these functionalities will maximize the socioeconomic value of demand-side flexibility for retailers, aggregators, buildings and consumers/prosumers.

Up to September 2020, the project results originated 47 journal articles, 35 indexed conference papers, 9 book chapters, 5 computational applications, 6 PhD thesis and 14 MSc dissertations. The project organized the 2nd International Conference on Smart Energy Systems and Technologies -SEST 2019 – held in Porto, Portugal, 9-11 September, 2019, whose proceedings appeared in both IEEE Xplore (https://doi.org/10.1109/SEST45671.2019) and SCOPUS.