

INTERFACE

TSO-DSO-Consumer INTERFACE architecture to provide innovative grid services for an efficient power system 824330



Programme:

H2020 Energy

Topic:

LC-SC3-ES-5-2018-2020

Call for proposals:

H2020-LC-SC3-2018-ES-SCC

Duration:

01/01/2019 to 31/12/2022

Funding scheme:

IA

Total cost:

€21,033,714

EU contribution:

€16,808,963

Coordinator:

EUROPEAN DYNAMICS LUXEMBOURG SA

The INTERFACE project develops an interface between transmission and distribution system operators (TSOs and DSOs) and their customer in order to allow seamless integration and efficient use of renewable energy in the electricity grid. The EU has set ambitious climate targets that require a major shift towards sustainable energy generation. With this transition, new challenges and opportunities arise for TSOs and DSOs.

Currently, decentralised power generation, such as photovoltaic systems, allows energy consumer to become prosumers, who not only consume, but also produce energy. However, the electricity grid must provide the technical basis to allow prosumers to contribute to it. Furthermore, economic and regulatory guidelines are needed.

INTERFACE contributes to legislative proposals adopted by the European Commission by promoting cooperation among network operators for grid balancing and congestion management. The project encourages a more effective use of services at both transmission and distribution levels, addressing challenges that arise with an increasing share in renewable energy. To achieve it, the project is using blockchain and Big Data management technologies.

The increased coordination in the electricity grid, thanks to INTERFACE's digital solutions, is expected to result in cost-effective and secure supply of electricity and also to encourage end-users to become active market participants (prosumers). Furthermore, these digital tools will provide a basis for new market structures, allowing a wider use of distributed renewable energy resources.

