

Platone project

Platone provides a seamless **integration of network and market operations**, simplifying the life of customers, distribution grid operator and aggregators, thanks to an **open-source multilayer framework**

Platone Strategic Challenge

Platone addresses the growing needs of DSO's to have **real-time insight** into the operation of their networks while unlocking new flexibility markets in a fair and open way. Main goal is to provide a **cost-effective** and **seamless, secure** power supply for their customers as active players while supporting the TSO in their system level responsibilities

Platone Strategic Objective

Platone realized a blockchain-based framework for distribution network operation and market operation creating a seamless **integration of local prosumers** in an open market structure



The project PLATform for Operation of distribution NEtworks (Platone) receives funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement no 864300.

Consortium



The Platone Open Framework

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Open source framework based on a blockchain architecture



MARKET
PLATFORM

BLOCKCHAIN SERVICE LAYER



DSO TECHNICAL
PLATFORM

DSO
LEGACY
SYSTEMS

BLOCKCHAIN ACCESS LAYER

BLOCKCHAIN
ACCESS
PLATFORM
AND SCD

NEWTORK DATA



3 Key Objectives

- Enable a **secure energy data sharing**, ensuring the data **ownership and governance**
- Allow **standard and flexible integration of external solutions** (e.g. legacy systems) and external services
- Create a **fair flexibility market**, involving all the energy stakeholders, including the customers

Results

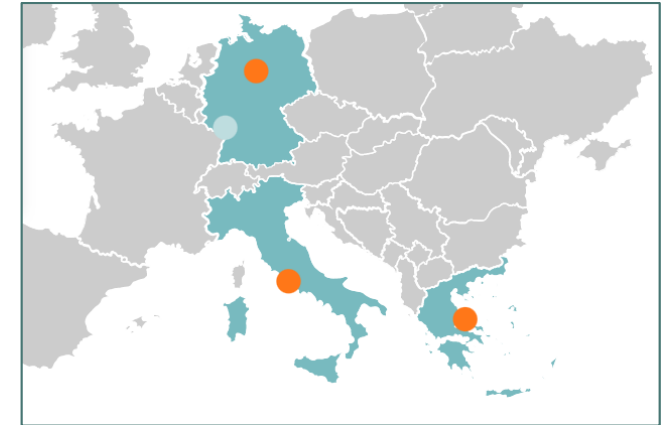
Platone Open Framework is completely **open source** and made available as a **modular framework**:

Market Platform: enables an **open and fair flexibility market** involving any possible market participant (DSOs, TSOs, aggregators, customers...) All the **market operations are registered and certified within the blockchain** service layer, ensuring transparency, security and trustworthiness among all the market participants.

Blockchain Access Layer provides a standard interface for the **integration of the energy data coming from meter devices** and offers a common data source (**Shared Customer Databases**) for allowing the access of all the energy data to any energy stakeholder in an easy and shared way without compromising **security and privacy**.

Platone DSO Technical Platform is an **open-source extensible microservices platform** and it allows DSOs to **manage the distribution grid in a secure, efficient and stable manner**. It is an evolution of the H2020 SOGNO platform that has been accepted in the well-recognised, international **Linux Foundation Energy (LFE)**.

Ongoing: 3-years experimentation activity, promoted by Resolution 352/2021 of the Italian National regulatory authorities ([RomeFlex](#) project)



Platone Open Framework was tested and validated in **1 Lab** (RWTH Aachen) and **3 field test demonstrations** in Italy, Greece and Germany.