



## Asset-Enabled Local Markets

*Cooperation of an automated marketplace for local electricity transactions and an integrated asset condition management system*

Enabling an automated P2P marketplace that incentivises the participation of low- and medium-voltage-grid users based on the capabilities of the grids' assets

### Distinctive Features

- The functional specification of an automated marketplace for local electricity transactions
- Adapted market mechanisms for small electricity volumes
- An integrated asset-condition management system (IACMS)

### Why

*The Pilot's motivations*

- Enable local energy communities
- Support congestion management in the DSO grid
- Improve supply reliability
- Provide flexibility and ancillary services to the DSO
- Increase the involvement of small non-controllable renewable generation, demand response, and storage
- Engage local P2P market transactions
- Increase amount of existing local PV generation

### What

*The Pilot's expectations*

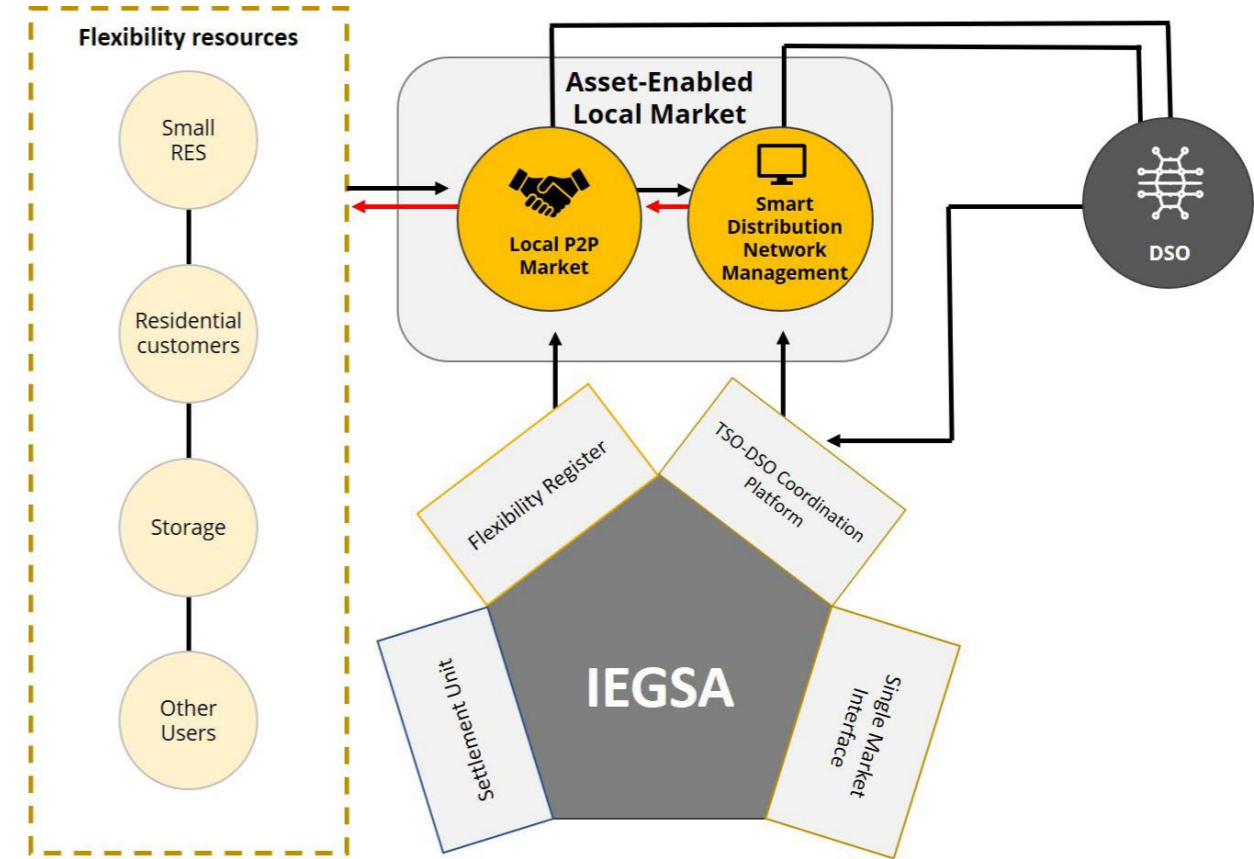
- **Technical:**
  - Smart asset management relying on IACMS
  - Bids with locational information (grid connection point/circuit)
  - Baseline calculations relying on quarter-hourly metering data
- **Business:**
  - Validation of a market model that is automated and adapted for small electricity volumes in an intraday timeframe
  - Use of a dynamic network-user tariff (DNUT)
  - P2P marketplace taking into account DSO grid topology
  - Entry simplification of small RES, demand response, and storage

### Business Model

- Cost-effective and transparent congestion management in an intraday timeframe
- Validating a decentralised market model for P2P trading
- Lowering barriers to the inclusion of demand response and small-scale DERs
- More efficiently allocating flexibility and maximising its value
- Upscaling the role of customers and creating new services and market rules within the local marketplace
- Deferring network investments

### KPIs Definition

- Renewable penetration achieved in the distribution grid
- The total number of offers offered in the marketplace
- The total number of offers accepted
- The number of congestion hours in the DSO grid



### User Features

- P2P market with intraday continuous trading
- A dynamic network-user tariff

### Grid Features

- An integrated asset-management system
- DSO grid topology fed into a market algorithm