

OneNet Open Day

WP9 Western Cluster

Portugal, Spain, France



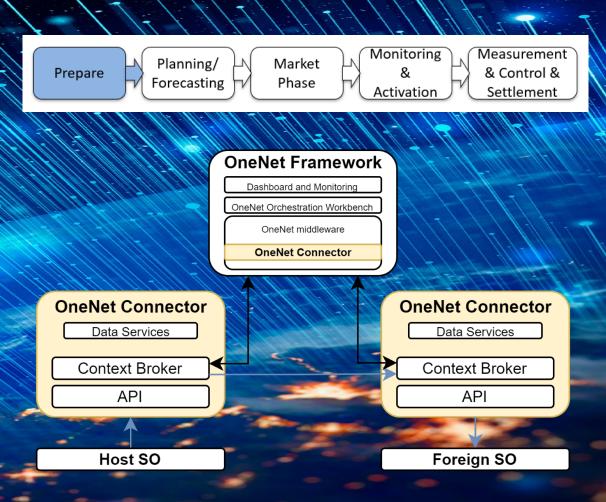
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 957739



Regional Use Case

Cross-Border Pre-gualification Process

Fields	Example
ID	PT-FSP30
Name	John Doe
Type of Resource	EV + Smart Charger
Single or Three Phase Load	Three-Phase
Mode of Activation	Automatic
Flexibility Direction	Up and Down
Locational Information	Lisboa
SO Connected	E-REDES
Single or Agreggated Portfolio	Single
Maximum Quantity	22 kW
Maximum Full Activation time	2 min
Grid Prequalification Result	Accepted



twork for



Coordination & Data Exchange



TSO

Flexibility



DSO

<u>Combined</u> testing of Pre-qualification processes

Identification and sharing of flexibility needs

Operational Planning

REDES



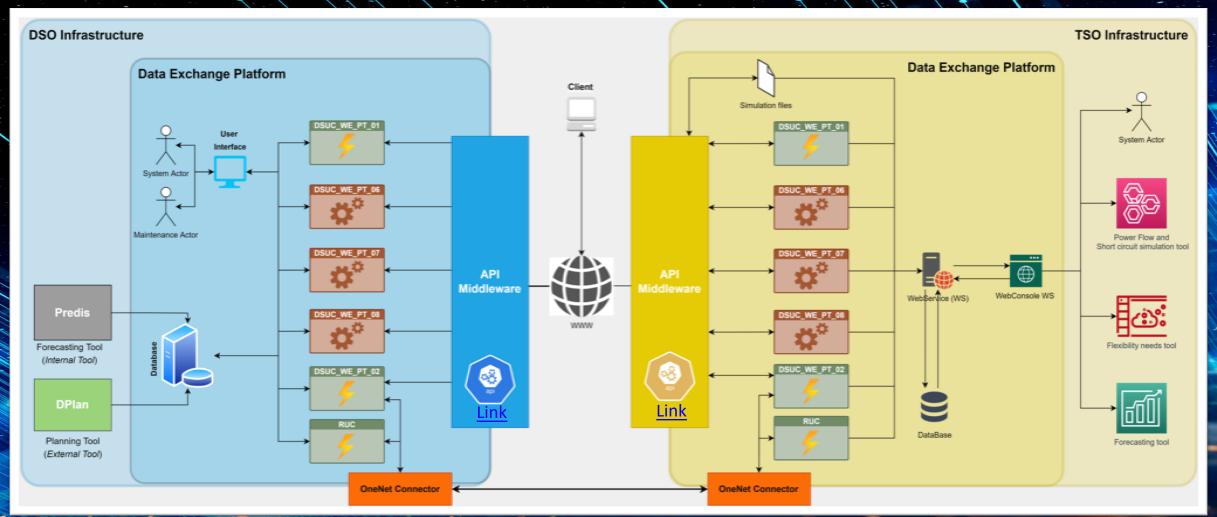
Combined and coordinated Maintenance Plans

Sharing of Generation and Load forecasts

Sharing of Short-circuits levels calculation

R&D NESTER

Technical Architecture & API Specification & Data Exchange

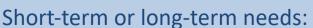


EUniversal

Western Cluster - Spanish Demonstrator DSOs operation

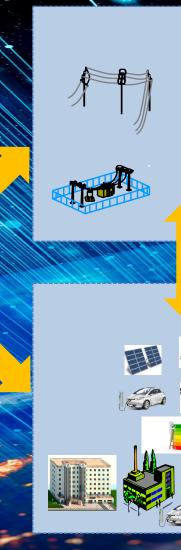
Distribution System Operator, DSO

bufd



- High voltage
- Low voltage
- Thermal overload





Network reinforcement

- Re-conductor and/or rebuild line
- New line
- Replace transformer
- Add a new transformer
- Add capacitor banks
- Upgrade equipment

Benefit cost analysis

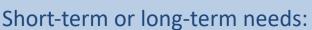
Flexibility

- Distributed generation
- Energy storage
 - Energy efficiency
 - Demand respond

DSOs operation

Distribution System Operator, DSO

Lufd



- High voltage
- Low voltage
- Thermal overload





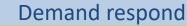
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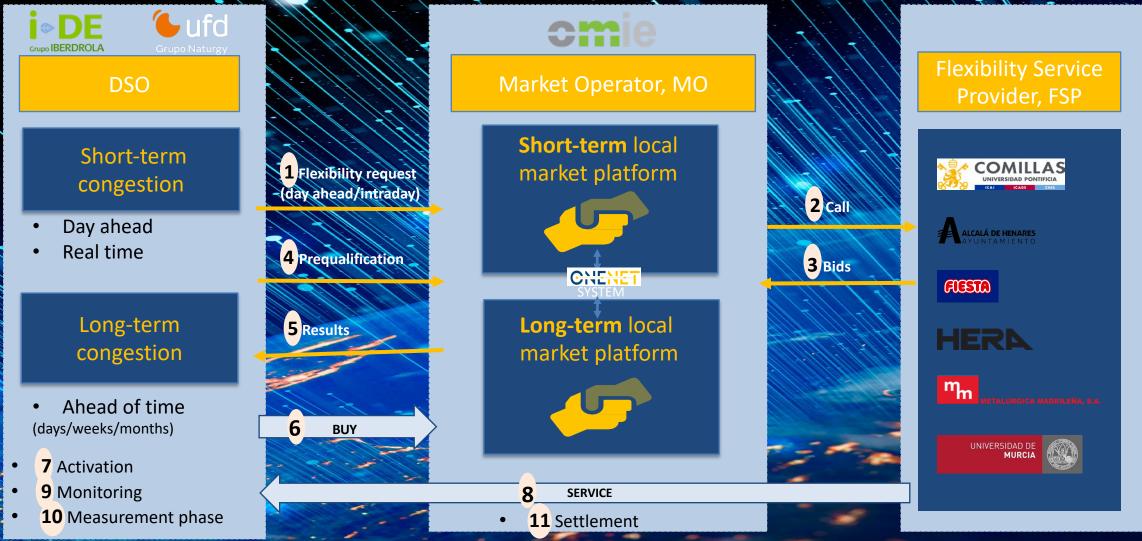
Flexibility

- Distributed generation
- Energy storage
- Energy efficiency





Flexibility adquisition = Market mechanism



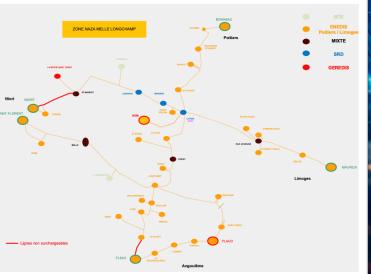
Western Cluster- French Demonstrator

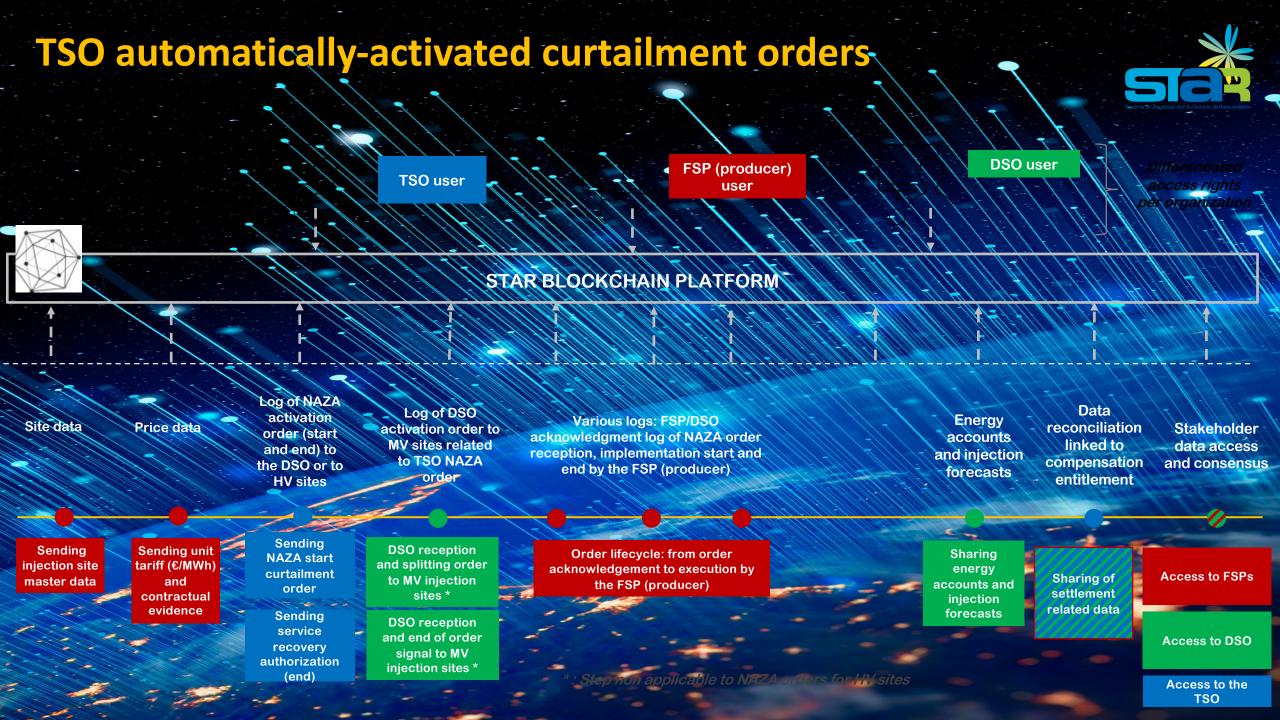




Key aspects :

- TSO and DSO congestion management
- Existing compensation mechanisms
- Blockchain based platform
- Objective : Enhance settlement data traceability and sharing between TSO DSO and producers through a dedicated platform





User journey - DSO / TSO

Illustration of a DSO or TSO user journey

1 - Login to STAR

SIA	Lenses Annual
Bienvenue	
sur le portail STAR	
Système de Traçabilité des Activations de Renouvelables	1
Enail stephane.m1@starmail.com	
Mot de pesse	
Connexian Mot de pase codele 7	
- 11 F 7 71.1	11/11/2

2 - Loading Master Data



3 - Loading Activation Documents

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	0		Valider	

4 - Loading Energy accounts

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Ŧ						
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		Fichier31402-10_10_2021.csv 1.4 Mo		×		
	CENTRALE_LMR_31402-01_99_2021.flv Format non reconnu			×ø		
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	Report_diagRT530-09_10_2021.xlm					
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Disservation			Importer Taile maximum ; 51			

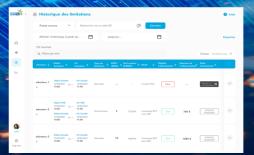
5 – Loading Energy Amount



6 – Reading Activation history, ESP compensation tariff



7 – Data consensus with the FSP



8 – Settlement and end of flow

On operational financial systems, out of STAR. Log can be retrieved in the History of activation UI

Panel Discussion