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Active participation of an actual prosumer to the Cyprus demo and its coordination by the ABCM-D platform

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Outline






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- **OneNet Open Call-Cyprus Demo**
- **Requirements for the Applicants**
- **Technical Features of the API**
- **Profile of an Applicant**

Cyprus Demo Overview

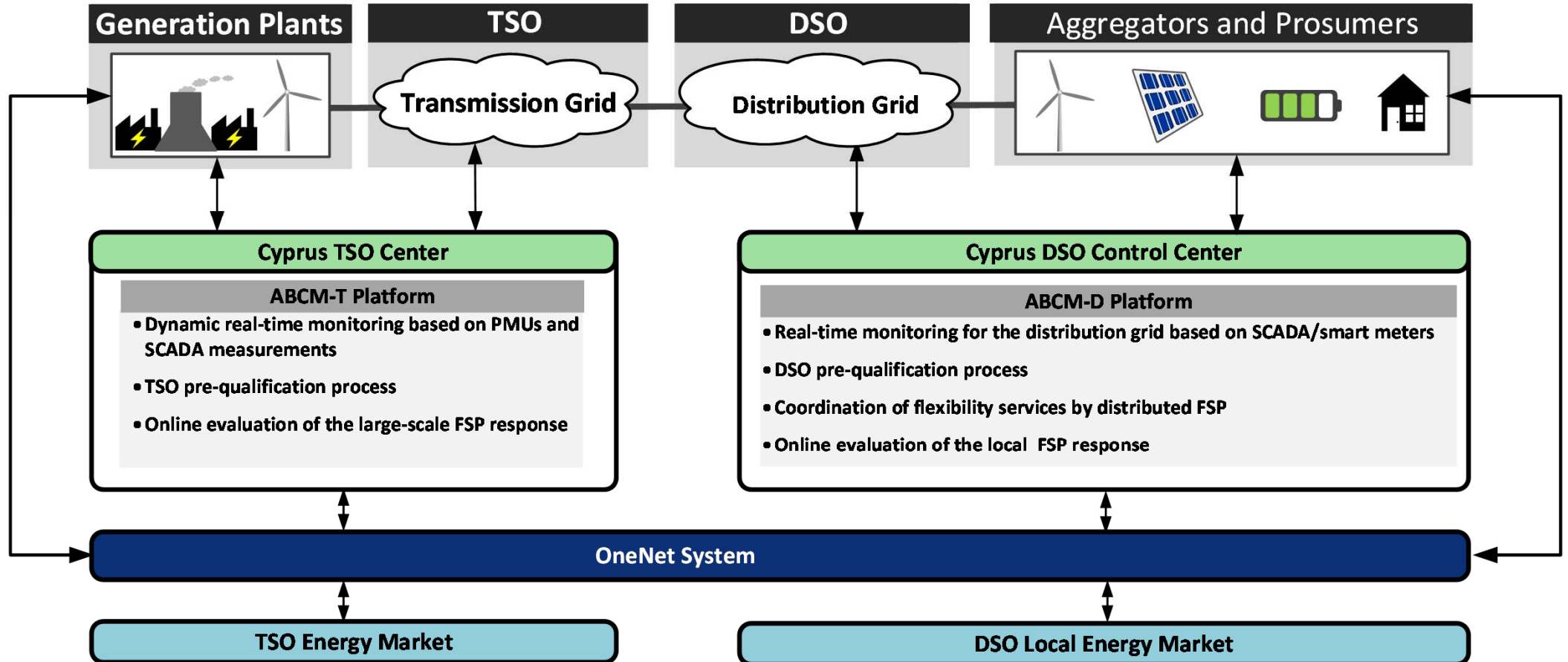
■ Cyprus Demo objectives

- Allow aggregators and prosumers to provide active power, reactive power and power quality flexibility services to the power grid
- Enable higher penetration of RES without risking the stability and integrity of the system
- Showcase that the effective collaboration of the critical actors of the power system through the OneNet System can benefit the grid

■ Key partners:

- KIOS Center of Excellence - University of Cyprus (UCY)  
- Cyprus Transmission System Operator (TSOC) 
- Electricity Authority of Cyprus – Distribution System Operator (EAC) 
- CINTECH Solutions (software integrator) 

Cyprus Demo Overview



OneNet Open Call-Cyprus Demo

▪ Consumer engagement to the Cyprus demo

- Active participation of an actual prosumer to the Cyprus demo
- Consumer will exchange real time information with the ABCM-D platform
- The flexible resources at the consumer will be coordinated by the ABCM-D platform

The provision of flexibility services by the consumer is a key objective of OneNet and the project under the OneNet Open Call will contribute to this direction

Requirements for the Applicants

■ The applicants must:

- Develop a prosumer-level energy management solution with API framework to facilitate the secure interconnection between the ABCM-D platform and the prosumer
- Bring a prosumer that will be equipped with:
 - A three-phase interconnected PV system with at least 5 kWp installed capacity,
 - Battery energy storage system
 - Fast reporting smart meter (with at least 400 ms reporting rate)

■ The prosumer must:

- Be able to provide active and reactive power regulation services within a range of 5 seconds
- Be located in Cyprus for identical weather conditions with the rest demo
- Contribute to the voltage and congestion management services that are directly linked with the two BUCs of the Cyprus demo

Technical Features of the API

- **Facilitate the seamless interconnection of the prosumer energy management system with the ABCM-D platform**
- **Send measurements from the prosumer level to the ABCM-D platform**
 - Smart meter (load consumption) or PV inverter (generation) measurements
- **Receive coordination signals from the ABCM-D platform (P^* and Q^*)**
- **Control through the energy management system the flexible resources of the prosumer**

Profile of an Applicant

- **Small or Medium Enterprise (SME)**
- **Provide a flexible energy management solution and will enable the interconnection of the prosumer with the ABCM-D platform**
- **The expertise field of the SME should include:**
 - Control and management of energy storage and PV systems
 - Monitoring of prosumer operation status
 - API development
- **Effective collaboration and communication with the Cypriot demo partners**

Thank you!

Questions?