

COUNTRY :  
REGISTRATION NUMBER :

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Are other jurisdictions offering or considering offering wind and solar PV (distributed), BESS and EVs in providing ancillary services directly or via aggregators?

Are there existing business cases for this and is hybridization a viable option?

What are the biggest challenges faced with the changing mix of generation, new responses to the providing ancillary services and innovative generation connection proposals?

The Greek demonstration of the CoordiNet project focused on providing ancillary services from Distributed Energy Resources (DERs) located in the distribution grid. More specifically, the services that were examined were congestion management and voltage control of both transmission and distribution network. The project outcomes show that for these types of services the bid location is required due to distribution network radiality. Also in the transmission voltage level, the TSO experience shows that location of the bid is important to the impact of the served flexibility. The aggregation of ancillary services for congestion management and voltage control requires more attention compared to balancing services, since the flexibility needs to be aggregated at a specific node at transmission or distribution level which is typically dictated by the corresponding system operator.

More challenges can be faced in the distribution system, since each feeder may be considered as a separate local market, in order to better facilitate the market solution and data handling as smaller networks are considered. When phenomena of reconfiguration of the distribution network occur, bids might be transferred to another local market, making the work of ancillary services aggregators even more difficult. DSO should always be aware of the network current topology and share this information with the market participants. Further difficulties are expected to be faced when transformer congestions are to be eliminated, since flexibility from various feeders can be procured to eliminate the congestion.

The reactive power products that are required for voltage control can be offered by a small number of resources in the distribution network with different technical characteristics that create great challenges to the aggregation and procurement of such services.