

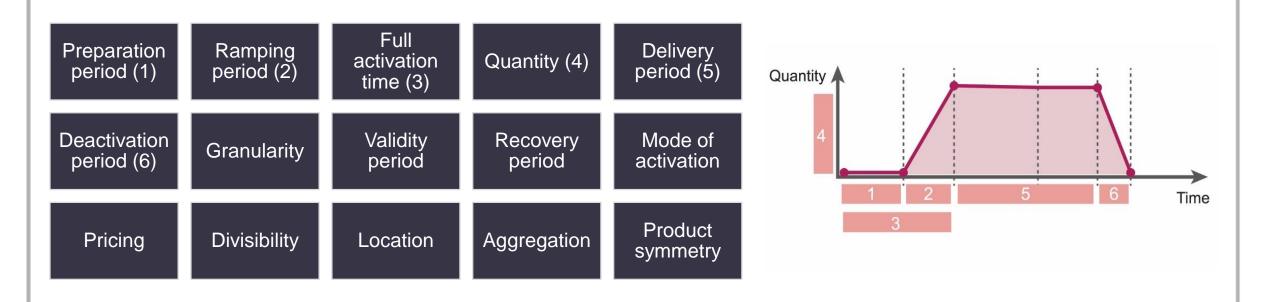
CoordiNet

2nd Workshop on Flexibility Markets of the Future and TSO-DSO Cooperation Session 1: What are the products in your market?

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- Q1: How do you define the flexibility you procure?
 - Definition of one or more standard products for each of the grid services considered (technology-neutral)
 - Based on standard and commonly defined product attributes
 - Not all product attributes are fixed at this stage (specific values or ranges of values)
 - Where possible, we propose common attributes for different services





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Balancing

FFR

FCR

aFRR

mFRR

RR

Congestion management

Congestion management product reserved

Congestion management non-reserved

Voltage control

Steady state reactive power

Dynamic reactive power

Active power

Inertial response

(physical) inertial response

Black start

Black start system restoration

Controlled islanding

See balancing + voltage control



- Q2: Are the defined services/products/parameters adapted to the specific characteristics of your network or can they be universally used?
 - We started with common product parameters for the 3 demo regions (GR, SE, ES)
 - For some grid services (e.g. congestion management) products are being adapted to local circumstances
- Q3: Do you use a contract for consumers/assets/appliances to participate in the flexibility market?
 - Yes, contracts are demo specific, sometimes even TSO/DSO specific (e.g. for SE contracts are standardized but certain aspects can be different depending on the agreements made with the FSPs)
 - Depending on the use case, there is a remuneration for availability and/or activation
- Q4: Is grid and/or product prequalification organized?
 - Yes, currently demo specific prequalification (e.g. for SE currently following requirements are set: above 0,1 MW relevant impact factor for the market, adequate metering equipment,...)



- Q5: Do you combine several products/services in one common flexibility market (joint procurement)?
 - For some of the use cases a common market is proposed (where we trade products for the same grid service but for both the DSO and the TSO)
 - Most other use cases focus on coordinated markets (with sequential setup)

BUC	Service tested	Coordination scheme
BUC GR-1a	Voltage control	Multi-level MM
BUC GR-1b	Voltage control	Fragmented MM
BUC GR-2a	Congestion management	Multi-level MM
BUC GR-2b	Congestion management	Fragmented MM
BUC ES-1	Congestion management	Common MM
BUC ES-2	Balancing	Central MM
BUC ES-3	Voltage control	Common MM
BUC ES-4	Controlled islanding	Local MM
BUC SE-1a	Congestion management	Multi-level MM (*)
BUC SE-1b	Congestion management	Distributed MM
BUC SE-2	Balancing	Local MM
BUC SE-3	Balancing	Multi-level MM (*)



Thank you!

D1.3 "Scenarios and products: Definition of scenarios and products for the demonstration campaigns"

https://coordinet-project.eu/publications/deliverables