

Framework Guideline on Demand Response

Unlocking aggregation in the Energy Community: opportunities and challenges

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Based on the draft that was put out for public consultation and without prejudice to the form/content of the final framework guideline.





- Topics of priority for new European rules
- New European rules on Demand Response
- Scope of the new rules
- Legal basis for aggregation in DR FG
- Harmonisation and target models in DR FG
- Main topics for the Framework Guideline
- European focus: wholesale electricity markets
- Roles and responsibilities
- Aggregation models
- Provision of the service



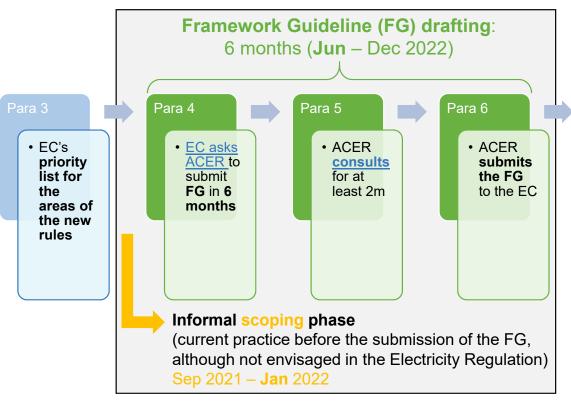
Topics of priority for new European rules

- Regulation (EU) 2019/943 defines the areas on which new European rules can be developed:
 - "rules implementing Article 57 of this Regulation and Articles 17, 31, 32, 36, 40 and 54 of Directive (EU) 2019/944 in relation to demand response, including rules on aggregation, energy storage, and demand curtailment rules."
- The EC every three years decides on the priority areas for the development of network codes and guidelines; in its last decision* in 2020 the EC acknowledged the need for transparent and non-discriminatory flexibility market, so it identified as one of the priority areas for electricity for 2020-2023 the harmonised electricity rules on demand-side flexibility, namely rules regarding demand side flexibility, including rules on aggregation, energy storage and demand curtailment rules.

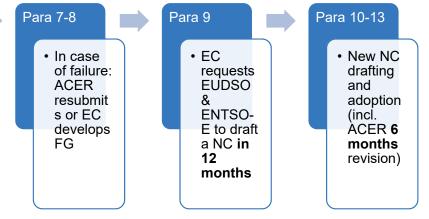


New European rules on Demand Response

Process based on Article 59 Electricity Regulation



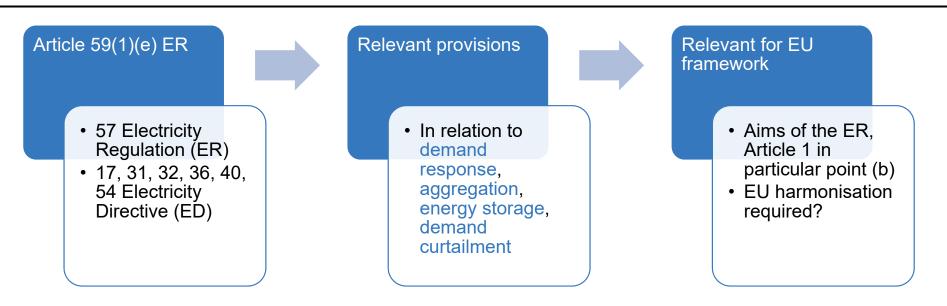
The EC sent a <u>letter</u> to ACER to initiate the <u>scoping</u> phase. ACER submitted the <u>result of the scoping exercise</u> to the EC. The FG shall set out clear and objective **principles for the development of a network code** on demand response, including rules on aggregation, energy storage and demand curtailment



ACER expert group on demand side flexibility



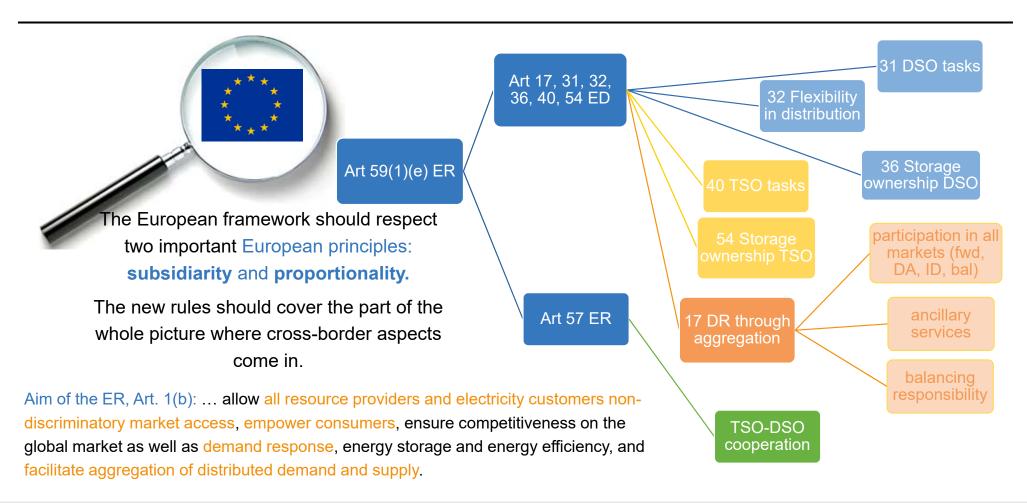
Scope of the new rules



- Several documents have been issued in the past on this topic including the ASSET Study on Regulatory priorities
 for enabling Demand Side Flexibility, the CEER Paper on DSO Procedures of Procurement of Flexibility, the gap
 analyses by TSOs and DSOs, the roadmap of the JTF (jointly by ENTSO-E and the European associations
 representing electricity DSOs).
- To a large extent **this work was used as basis for ACER's work** on this topic (both during the scoping phase, but also now during the drafting of the framework guideline).



Legal basis for aggregation in DR FG





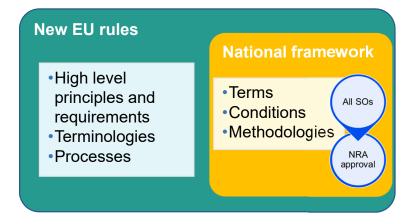
Harmonisation and target models in DR FG

No harmonisation

National implementation may impact XB markets.

Totally different national implementation may hamper activity across MS, reducing market access / available resources.

Middle way: *path* towards harmonisation *where necessary*



Target model 2022

Not enough experience to

- select the right model
- establish the right balance between European harmonisation and adaptability to national context





Main topics for the Framework Guideline

General requirements for market access

- Requirements to be further specified and clarified at European level, to ensure a level playing field for the participation of all the resources in the electricity wholesale markets
- Aggregation models
- Baseline & measurement
- Imbalance settlement
- Frequency containment reserve
- SO-owned storage facilities

Prequalification

- European principles for the prequalification, in order to smoothen the process and lift any unnecessary entry barriers for the participation of all the resources
- Avoid duplications in the prequalification processes
- Simplification of the prequalification processes

SOs interactions and data exchange

- Principles for the coordination of local markets with wholesale markets, and between TSOs/DSOs, ensuring coherence in the interaction across different markets and different time frames
- Market interaction
- Operation of local markets
- SOs coordination
- Data exchange

Congestion management

- Requirements for the market-based procurement of products used for congestion management
- Products
- Procurement and pricing
- Transparency and information provision
- Network development plans
- Harmonisation process

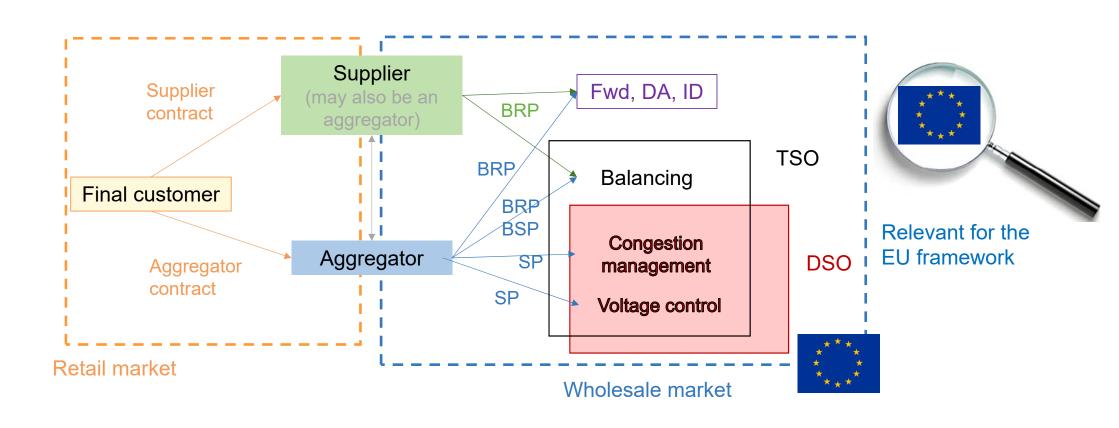
Voltage control

- Requirements for the market-based procurement of products used for voltage control
- Products
- Procurement
- NRA assessment
- Reporting

In the context of this presentation the focus is on the aggregation models but other topics addressed in the FG are also relevant for unlocking aggregation, such as prequalification, SOs coordination and data exchange.



European focus: wholesale electricity markets





Roles and responsibilities

TSO

DSO

Fwd, DA, ID

Balancing

Congestion

management

Voltage control

Market participant: at least a balancing responsible party*, BRP, and may also be a service provider (balancing or other, depending on its participation in the SOs' procurement of services).

control – in addition to balancing services which already exist.

Market participant

The new rules will define the service providing unit/group and service provider (SP) for any market participant providing any system operator (SO) services (for any or both the TSO and the DSO), in particular for congestion management and voltage

BRP

BRP BSP

SP

SP

The aggregator as a market participant should be (or have) a BRP and as a SP should be qualified by SO(s) to be able to offer then system services.



Aggregation models

Imbalance

No matter which models are selected for aggregation in each MS, it should be **clear** in the European rules how the calculation of the following values is conducted in each of the **cases**: final position, allocated volume, imbalance adjustment, imbalance.

In order for this to be achieved, the different **cases** should be exhaustively described in the new rules as a grouping of the different aggregation models based on specific parameters:

- the number of BRPs per connection point and per metering point, as well as
- the type of the applied compensation mechanism.

based on measurements or profiles per connection point Allocated volume

Withdrawals

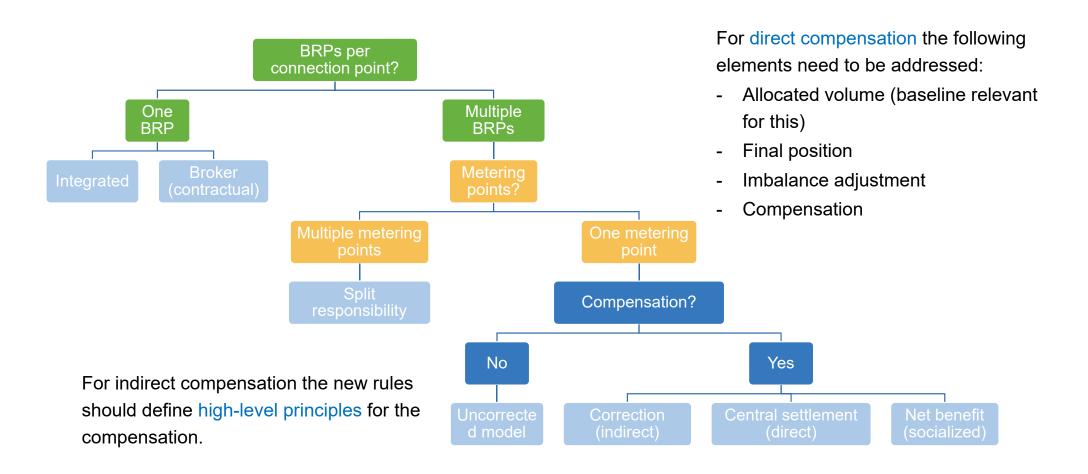
Internal commercial schedules

External commercial schedules

imbalance adjustment: energy activated by the TSO for balancing, congestion management, other purposes



Aggregation models





Provision of the service

Benefits for not having a baseline (target model when allocation based on smart meters, and final position clarified), but harmonisation if continued to be used.

No obligation for applying a baseline, nor to be restrictive when setting the requirements for the establishment of a baseline.

When the baseline is assumed as reference for checking the delivery, SOs to follow common general principles for its establishment.

Process for achieving further standardization, subject to an assessment to evaluate the benefit in achieving the aims of the Electricity Regulation.

If the control of the provision of an SO service is based on measurement:

- the granularity of the meter needs to be at least equal to 15 min (ISP);
- the new rules will describe the conditions for the use of sub-metering for the measurement of the provision of the service.

Thank you for your attention





