

ACER workshop on the framework guidelines on demand response

28 June 2022

9.30 - 11.30 CET

Online workshop

Public information



Opening 9:30 – 9:40

Christophe GENCE-CREUX, Head of the Electricity Department, ACER

Context

Agenda

Housekeeping rules



Opening – Context

- The framework guideline (FG) aims at the development of new European rules enabling market access for demand response, including load, storage and distributed generation (aggregated or not), as well at facilitating the market based procurement of services by distribution and transmission system operators.
- Although the formal process which started with the priority list is for the establishment of a network code (NC), the strong links with the existing legal framework require us to use as starting point the relevant provisions, without excluding the possibility of amendments in the existing framework; moreover, a NC includes requirements directly applicable to all Member States, however, in the FG we also include the development of methodologies in the context of the new European rules, which points to guidelines.
- The FG is for European rules on demand response; although the term flexibility has been broadly used,
 ACER understands that since it is a non defined term, a lot of confusion comes from using this term in
 multiple different contexts instead of using the respective term which is appropriate for each of the contexts;
 we consciously try to address this topic in the FG.
- It is important to note that the FG is a **high-level document** and should **not** be confused with the new rules that should be developed in the next phase. The FG includes objectives, principles, processes, definitions and high-level requirements.



Opening – Agenda

ndicative time	DRAFT AGENDA	Speakers
9:20-9:30	Dial-in time	
9:30-9:40	Opening	Christophe Gence-Creux ACER
9:40-9:50	European Commission's request to acer for drafting framework guidelines	Sabine Crome, European Commission
9:50-10:30	Content of the framework guidelines on demand response submitted to public consultation General provisions General requirements for market access Prequalification	Athina Tellidou, ACER Cristina Vazquez Hernandez, ACER Guro Grøtterud, ACER
10:30-10:40	Coffee break	
10:40-11:25	Content of the framework guidelines on demand response submitted to public consultation Data exchange and SOs coordination Congestion management Voltage control	Athina Tellidou, ACER Cristina Vazquez Hernandez, ACER Guro Grøtterud, ACER
11:25-11:30	Closing session	Mathieu Fransen, ACER

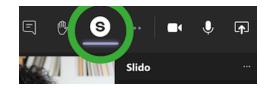


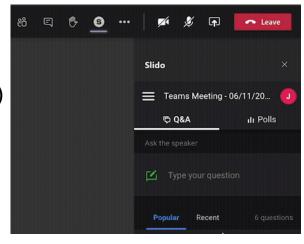
For posing questions, use Slido

Please be kindly reminded that your mic is muted throughout the webinar.

To ask questions:

- ✓ Use <u>Slido</u> during the presentation (<u>Do not</u> use the chat to pose questions)
- ✓ "Like" other questions
- ✓ Use labels with your question
- ✓ Reply to/comment on other's questions





Slido :

- ✓ In MS Teams
- ✓ Through <u>www.slido.com</u> with **#ACER2022**
- Or scan the QR code with your mobile pone
- ✓ Or use direct link https://app.sli.do/event/aUd9LgaV9eAktx1g4yVX6P
- At the end of the main sections we will address some questions, as time allows.
- The <u>slide pack will be shared with you</u> after the webinar via email and on the ACER website (including a recording of this webinar).



European Commission's request to ACER for drafting the FGs on DR

9:40 - 9:50

Sabine CROME, European Commission



Network Code on Demand Side Flexibility

Sabine Crome
European Commission – DG Energy
Internal Energy Market



Legal basis and process

- Article 59(1)(e) Electricity Regulation
 The Commission is empowered to establish a network code on rules
 - implementing Article 57 of the Regulation and Articles 17, 31, 32, 36, 40 and 54 of the Electricity Market Directive in relation to demand response, including rules on aggregation, energy storage and demand curtailment.
- Priority list for the development of network codes and guidelines 14
 October 2020
- ACER scoping exercise September 2021 to January 2022
- Communication "Short-Term Energy Market Interventions and Long Term Improvements to the Electricity Market Design – a course for action" – 18 May 2022

The Commission also proposes to accelerate the development and adoption of a new network code dedicated to demand response



Request for framework guidelines to ACER – 1 June 2022

Guiding principles

- Ensure that no undue regulatory barriers hamper the participation [of demand side flexibility] in any of the existing electricity markets
- Enable the participation [of demand side flexibility] in market-based procurement of services needed by the system operators, where applicable

Elements to be covered

- Load, storage (in particular when combined with load), distributed generation
- Particular focus on products and services to solve physical congestions and on electricity balancing markets
- SO cooperation, information and data exchange, value stacking and interaction between markets, prequalification processes, baseline methodology (incl. measurement and validation), aggregation, TSO/DSO owned storage



Content of the FGs on DR – General provisions

9:50 - 10:00

Athina TELLIDOU, Electricity Department, ACER

Ask question via Slido in MS Teams, by scanning the QR code or using the direct link:

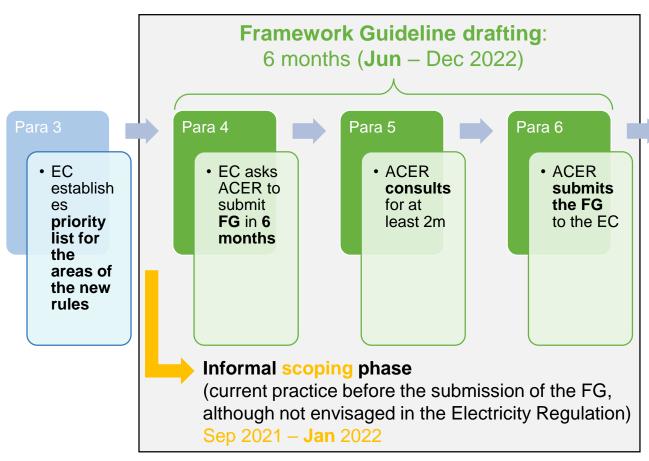
https://app.sli.do/event/aUd9LqaV9eAktx1q4yVX6P



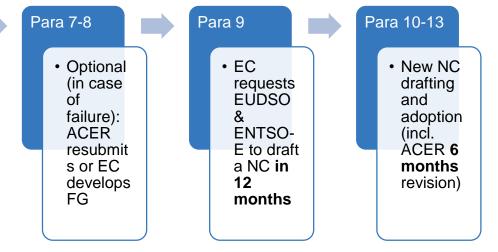


New European rules on Demand Response

Process based on Article 59 Electricity Regulation



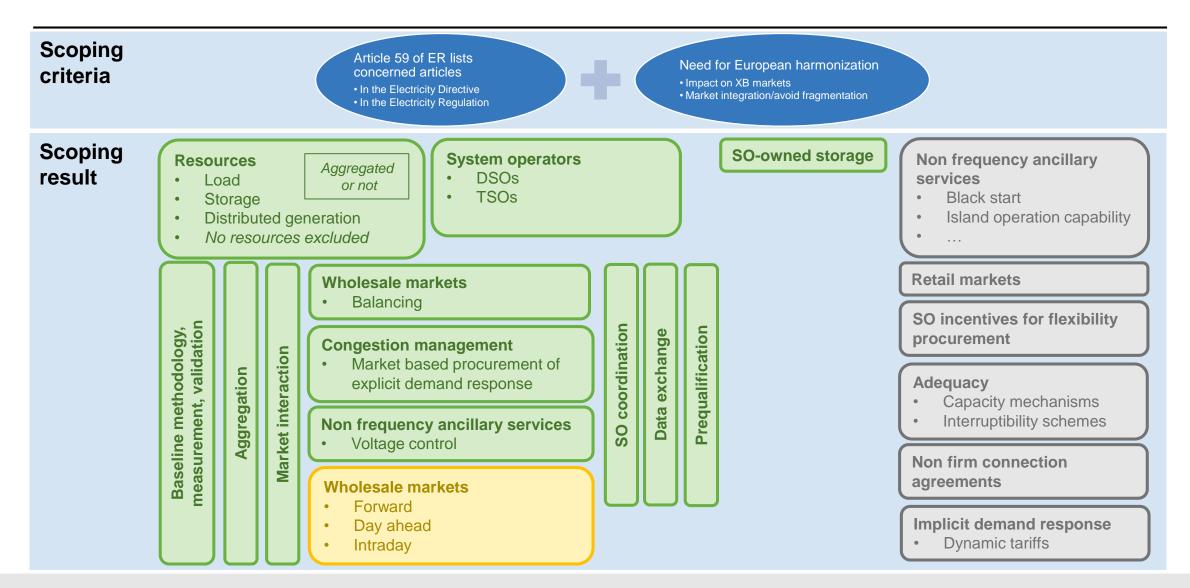
The EC sent a <u>letter</u> to ACER to initiate the <u>scoping</u> phase. ACER submitted the <u>result of the scoping exercise</u> to the EC. The FG shall set out clear and objective **principles for the development of a network code** on demand response, including rules on aggregation, energy storage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



ACER <u>expert group</u> on demand side flexibility



Scope of the Framework Guideline





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

Prequalification

European
 principles for the
 prequalification,
 in order to
 smoothen the
 process and lift
 any
 unnecessary
 barriers for the
 participation of all
 the resources

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

Congestion management

 Requirements for the marketbased procurement of products used for congestion management

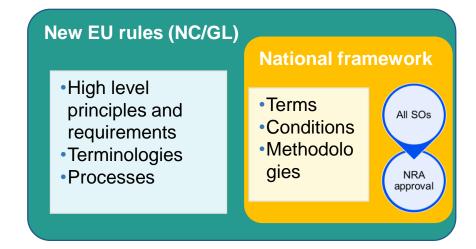
Voltage control

 Requirements for the marketbased procurement of products used for voltage control



New rules on a topic in progress

- Demand response and other relevant resources do not participate to a large extent in European electricity markets.
- A future European framework should
 - Ensure that no undue regulatory barriers hamper participation in existing markets
 - Enable participation in market based procurement of services needed by the system operators
- Uncertain benefits of defining Europe-wide target models today
- Further harmonisation may be needed on a later stage





European harmonisation

- XB relevance, especially through balancing
- Enhanced competition
- Lower prices/higher volumes

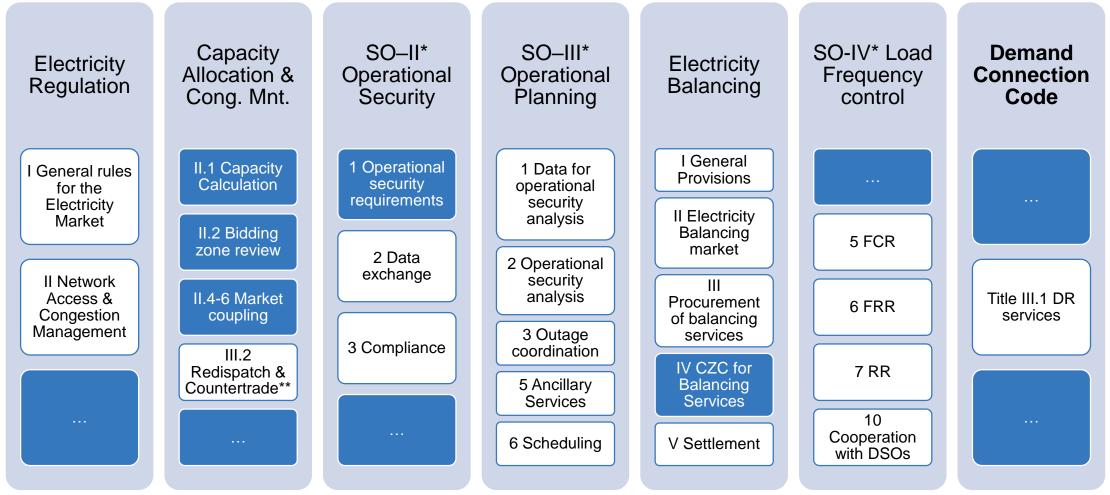


National network codes which do not affect cross-zonal trade

- Local/regional specificities
- Costs of harmonisation



Interlinks with existing legal framework



The blue boxes indicate other Chapters of the respective Regulations, which were assessed with respect to their relevance to the new rules, but at this point they are excluded from the scope of the new rules

^{* =} due to the size of the SO regulation it was split into the three main parts II, II and IV in this overview

^{** =} The ACER recommendation on CACM 2.0 proposes to move this chapter and the provisions on CGM and GLDP to the SO part III on Operational planning



Content of the FGs on DR – General requirements for market access

Athina TELLIDOU and Guro GRØTTERUD, Electricity Department, ACER

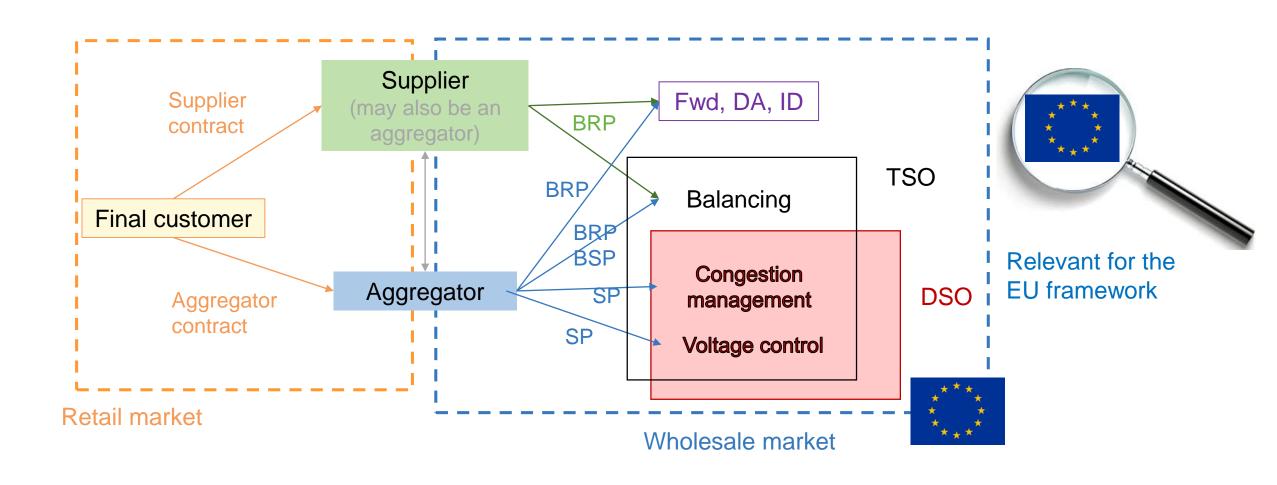
Ask question via Slido in MS Teams, by scanning the QR code or using the direct link:

https://app.sli.do/event/aUd9LqaV9eAktx1q4yVX6P



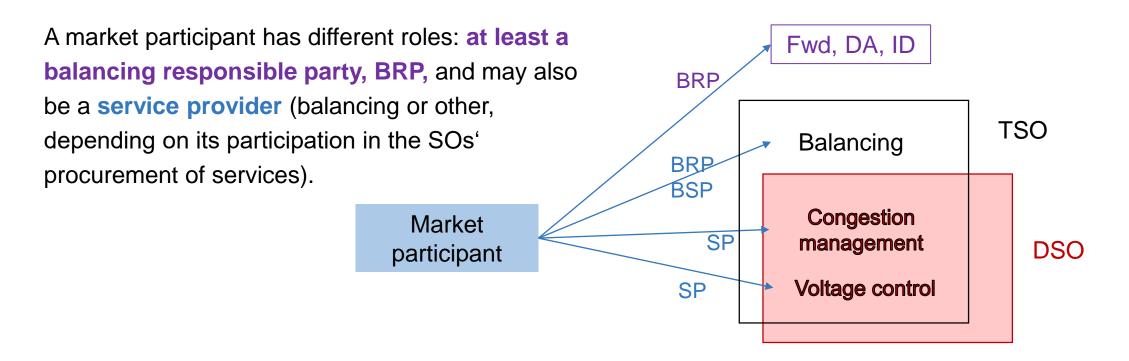


European focus: wholesale electricity markets





Roles and responsibilities



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 control – in addition to balancing services which already exist.



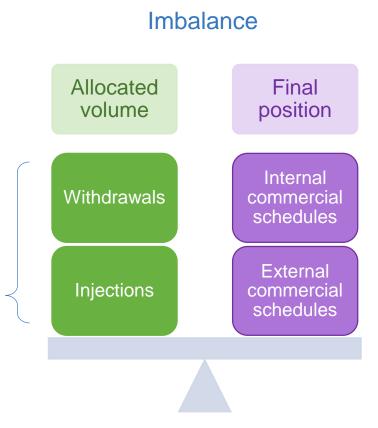
Aggregation models

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 poin



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



Provision of the service

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.



SO-owned storage facilities

Third party owned storage facilities

By default, storage facilities are owned and operated by a third party

SO-owned storage facilities – subject to derogation

Derogation conditions: a tendering procedure concludes that the service may not be provided by a third party

New EU rules

- Principles for the tender, including transparency, technology neutrality
- Principles for the NRA approval of the tendering process, including maximisation of social welfare compared to an SO-owned storage

New EU rules

The storage facility may be owned and operated partly by an SO, partly by a third party. Derogation conditions apply only to the SO-operated part.

The storage facility may be owned and operated by an SO alone

SO-owned storage facilities – outgoing conditions

CEP: regular public consultation to assess the interest of third parties

New EU rules

- A third party can provide the necessary service
- CBA gives preference to phasing out of SO-owned storage facility



Content of the FGs on DR – Prequalification 10:10 – 10:20

Cristina VAZQUEZ, Electricity Department, ACER

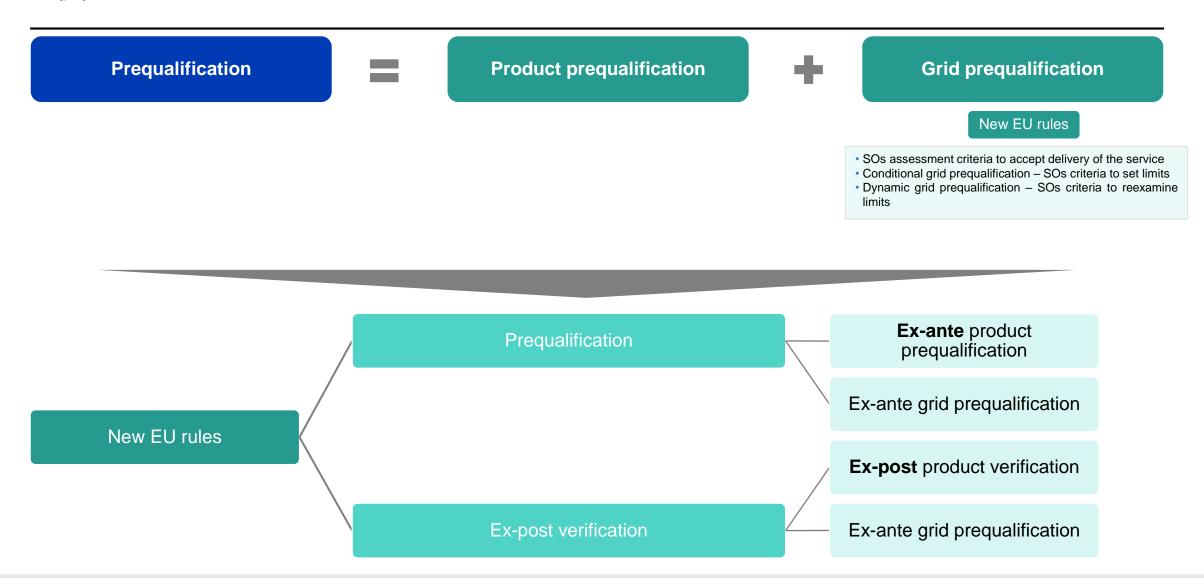
Ask question via Slido in MS Teams, by scanning the QR code or using the direct link:

https://app.sli.do/event/aUd9LqaV9eAktx1q4yVX6P



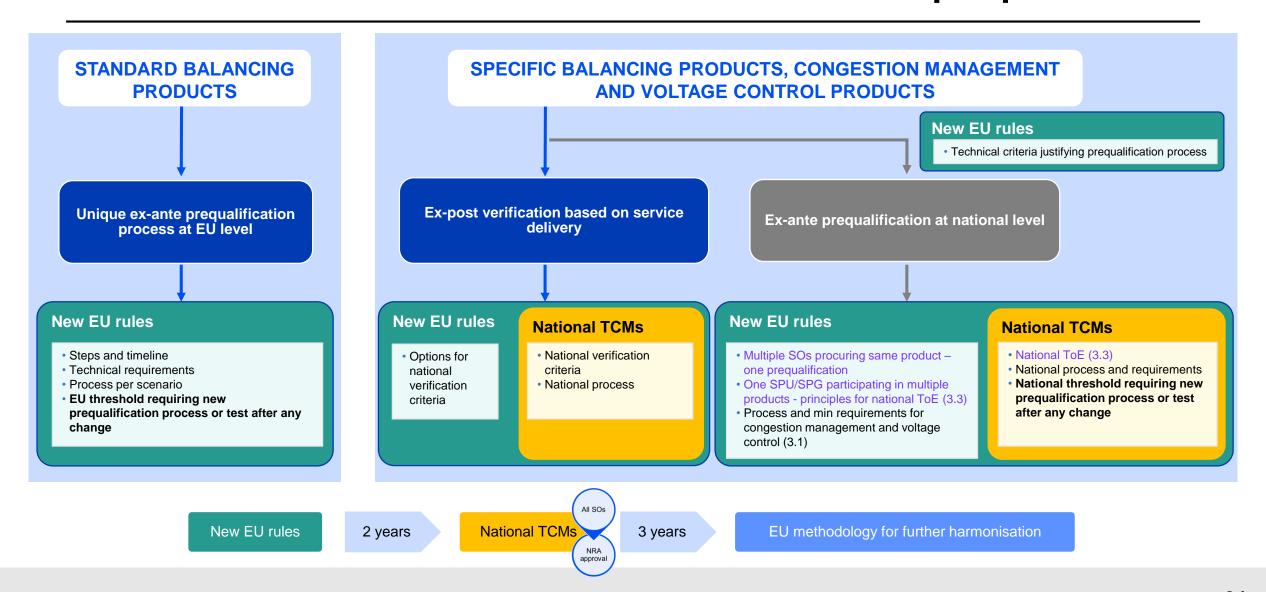


Prequalification: scope





Simplifying and avoiding duplications in product prequalification





Q&A for Session 1 10:20 – 10:30



Mathieu FRANSEN, Team leader – Electricity Department, ACER

Ask question via Slido in MS Teams, by scanning the QR code or using the direct link:

https://app.sli.do/event/aUd9LqaV9eAktx1q4yVX6P





Coffee break 10:30 – 10:40



Content of the FGs on DR – Local SO services and market interaction 10:40 – 11:00

Guro GRØTTERUD, Electricity Department, ACER

Ask question via Slido in MS Teams, by scanning the QR code or using the direct link:

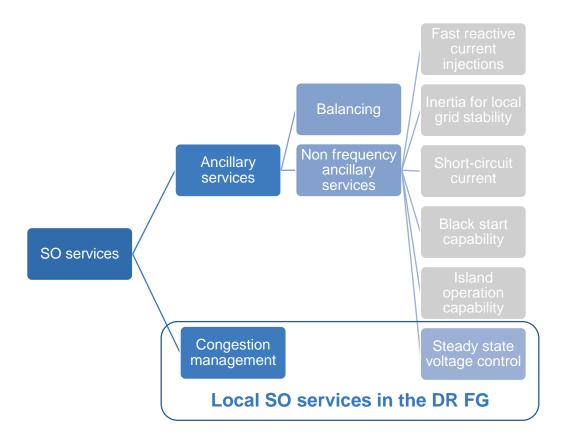
https://app.sli.do/event/aUd9LqaV9eAktx1q4yVX6P





Local SO services in the DR FG

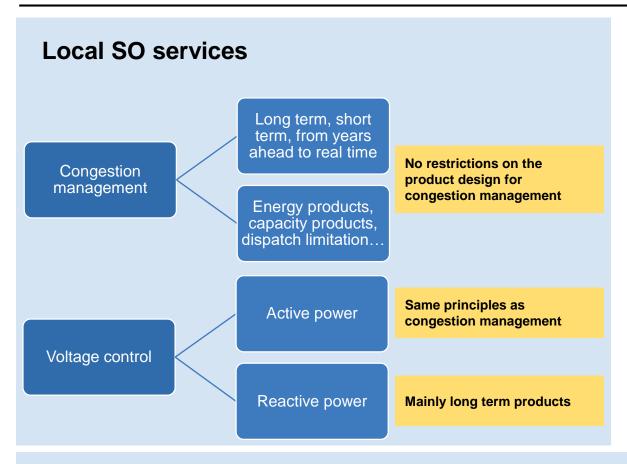
- The Clean Energy Package provides the legal basis for market based procurement of local SO services, with explicit emphasis on demand response and other relevant resources.
- Only market based local SO services relevant for European rules have been included in the scope of the Framework Guideline

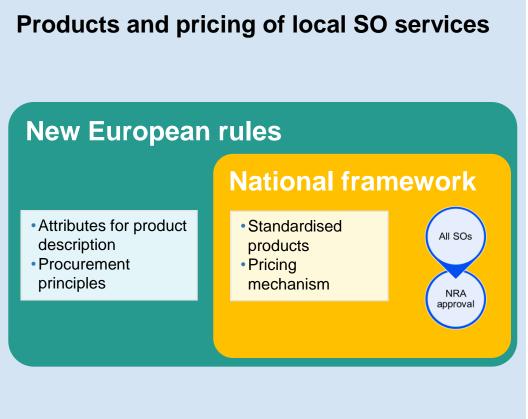


In grey: out of scope of the DR FG



Local SO services: products and pricing





Non market based procurement

CEP: NRA derogation to market based procurement if economically not efficient

New European rules

NRA assessment

- Principles
- Frequency

Non market based procurement

Principles/guidance



Local markets for SO services, interaction with wholesale markets

Local SO services may be purchased in a wholesale market or in a local market for SO services

Local markets for SO services may be organised by SO(s) or a third party

The new rules shall define common principles for such local markets

Wholesale markets*

services

Local markets for SO services

- ✓ IT solution (platform)✓ Contact with SPs
- ✓ Clearing and settlement of bids
- Product definition
- Pricing mechanism
- Bid selection
- Activation of bids
- Control of delivered service

Operated by SO

Operated by third party*

New European rules

Common principles for

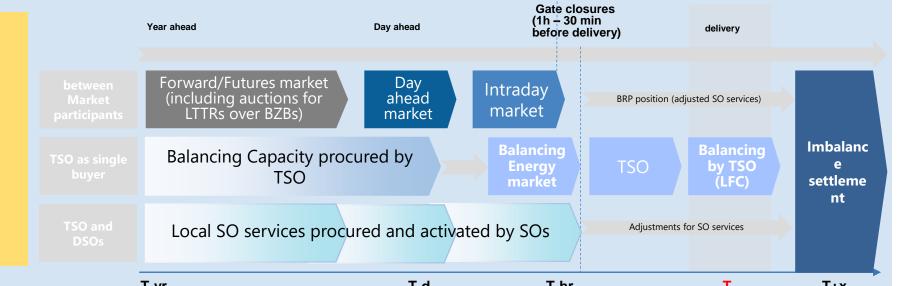
- Neutrality & non-discrimination
- Transparency
- Data protection
- Data exchanges between platforms and SOs
- Independence

*subject to national rules

Interaction with wholesale markets is particularly relevant for (shorter term) local SO services based on active power.

Uncoordinated markets may cause:

- Market fragmentation
- Loss of liquidity
- Possibilities for gaming/market abuse





Market design and market interaction

The new European rules shall provide high level principles for purchase of local products in

- wholesale markets
- local markets for SO services

They shall also provide principles for interaction of these activities with wholesale markets.

New European rules

- Minimise possibilities for withholding of capacities and for market abuse
- Maximise liquidity in each market
- Possibility to propose bids that are not procured in one market in another (if qualified)
- SOs shall not unduly distort electricity wholesale markets by procuring SO services
- Data exchanges between platforms to enable
 SPs to be active in several markets

National framework

 Overall market design



All SOs



Harmonisation and experience sharing

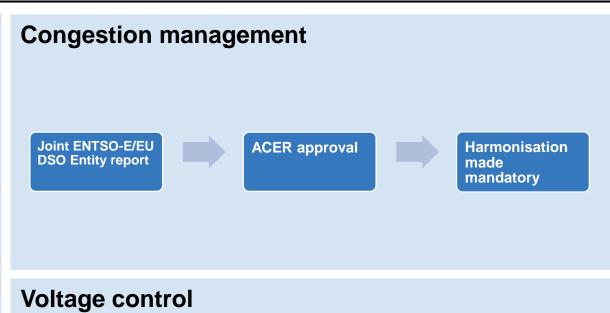
Although the FG provides that most features of the market design are set on MS level today, further harmonisation may be relevant in the future, once further knowledge is reached.

The process for harmonisation aims at detecting and discussing if, how, when and for which features further harmonisation is required.

European harmonisation •XB relevance, especially through BAL •Enhanced competition •Lower prices/higher volumes



- Local/regional specificities
- Costs of harmonisation







Content of the FGs on DR – SO coordination and data exchange 11:00–11:10

Guro GRØTTERUD and Cristina VAZQUEZ, Electricity Department, ACER

Ask question via Slido in MS Teams, by scanning the QR code or using the direct link:

https://app.sli.do/event/aUd9LqaV9eAktx1q4yVX6P

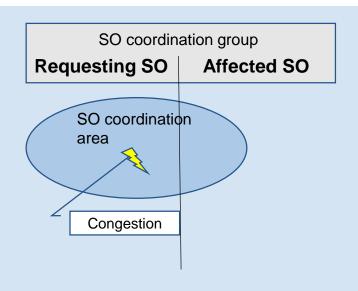




SO coordination

Overall aim of coordination: optimal use of available resources

- SOs may activate resources in the grid of another SO
- Each SO responsible with solving congestion in its own grid, including covering the related costs
- An SO may refuse activation of a resource if this aggravates congestion/voltage issues. Guidance on remuneration of concerned SP, including mitigating risk of gaming.



New European rules

- Common terminology
- Principles for SO coordination and data exchange
- Principles for forecasting and solving congestion and voltage issues

National framework

- Terms
- Conditions
- Methodologies





Data exchange

Preparation phase

Operation phase

from long to shorter before real time

Settlement phase

after real time

SO service provision tool

New EU rules

- Centralise all applications for all SO products (prequalification and ex-post verification processes)
- Avoid duplications in applications, simplify access, etc.
- Data governance including data quality, responsibilities, data privacy and confidentiality and interoperability

New EU rules

- TSO&DSO process to determine and exchange:
 - ✓ Physical congestions
 - Available volumes of SPUs/SPGs that may be affected by physical congestions and SO activations
 - Contracted capacities of SPUs/SPGs for each product.
 - √ Selected energy volumes

New EU rules

- Data exchange for SO-related services including validation, baseline related data, when required, at least for each aggregation model.
- Data (at least activated energy volumes per SPU/SPG per product)
- Data aggregation where possible, single point of contact receiving data, transparency and traceability and error detection and correction

New EU rules

National framework



Q&A for Session 2 11:10 – 11:20



Mathieu FRANSEN, Team leader – Electricity Department, ACER

Ask question via Slido in MS Teams, by scanning the QR code or using the direct link:

https://app.sli.do/event/aUd9LqaV9eAktx1q4yVX6P





Closing 11:20 – 11:30

Mathieu FRANSEN, Team leader – Electricity Department, ACER



The FG as a deliverable and the public consultation

- For the public consultation draft: we would very much welcome your comments and concrete proposals
 - you have the possibility to comment to each separate paragraph, expressing your opinion on a likert scale, but also adding your specific comment or even a wording suggestion for amending the draft;
 - all the responses will be published after the end of the public consultation, and the ACER reply to the (summarised) responses will follow (together with the publication of the FG).





- 1. Is the draft framework guideline fit for its purpose?
- 2. Are there chapters/sections that would need further clarification? (max. 2 answers)
- 3. Are there any topics that are not covered in the current draft framework guideline, which you would consider should be included? (Open text question)

Thank you for your attention



