

European Union Agency for the Cooperation of Energy Regulators

## Stakeholders Workshop on Demand Side Flexibility

15 November 2021



## Opening

Agenda Housekeeping rules



DRAFT AGENDA			
09:15 - 09:30	Dial-in time	Starts promptly at 09:30	
09:30 - 09:35	Opening		
09:35 - 09:50	Process for the establishment of European rules for demand side flexibility		
	Q&A		
09:50 - 10:15	Scope for the new rules (including assessment criteria)		
	Q&A		
10:15 - 11:15	Inputs from the Expert group		
	Q&A		
11:15 - 11:30	Closing		



- Please keep your **mic muted** and your **camera off** throughout the workshop.
- You may pose questions via chat; all attendees will view all questions (and replies given in the chat).
- In case further clarifications are needed for a question you asked in the chat, you will be kindly asked to **open your mic**; please remember to **mute it** once clarifications have been provided.
- <u>After each agenda-item</u> we have time for a Q&A session for this agenda-item and go through the questions.

• The slide pack will be shared with you after the end of the workshop.



## Process for the establishment of European rules for Demand Side Flexibility

Process for the establishment of a new NC Article 59 of the Electricity Regulation High-level planning Main tasks for ACER External expert group



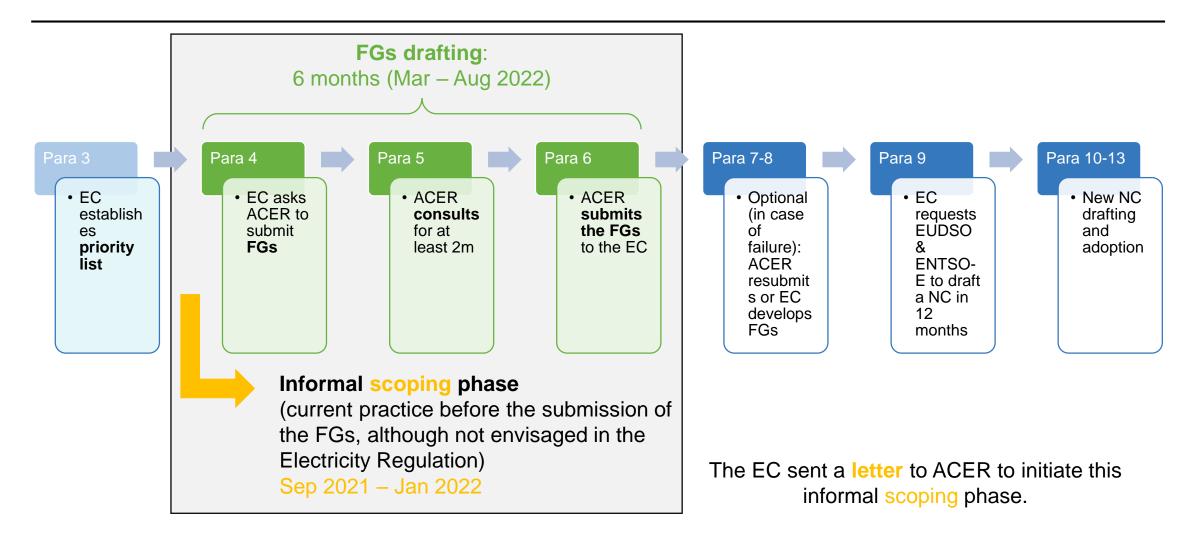
- Article 59 of the Electricity Regulation<sup>1</sup> defines the process for the establishment of network codes, with the aim to ensure uniform conditions for the implementation of the Regulation in different areas.
- One of the areas is rules in relation to demand response, including rules on aggregation, energy storage, and demand curtailment rules.
- The process starts with the Commission establishing a priority list, identifying the areas to be included in the development of network codes.
- In its recent Decision<sup>2</sup> the Commission identified as priority, for the development of harmonised electricity rules, the rules regarding demand side flexibility, including rules on aggregation, energy storage and demand curtailment rules.

<sup>1</sup> Regulation (EU) 2019/943 of 5 June 2019 on the internal market for electricity

<sup>2</sup> Commission Implementing Decision (EU) 2020/1479 of 14 October 2020 establishing priority lists for the development of network codes and guidelines for electricity for the period from 2020 to 2023 and for gas in 2020



### **Article 59 of the Electricity Regulation**





Action	Date
External expert group working throughout scoping and framework guidelines drafting	Sep 2021 – Aug 2022
<b>ACER</b> informal scoping, incl. stakeholder consultation on scope of NC or amendments of existing NCs and GLs	Sep – Dec 2021
ACER to inform COM on outcome of scoping	Jan 2022
COM request to ACER to submit non-binding framework guidelines	Feb/Mar 2022
ACER drafting of non-binding framework guidelines to COM (within 6 months)	Mar – Aug 2022
ACER submission of non-binding framework guidelines to COM	Aug 2022
COM formal request to ENTSO-E and EU DSO to convene a drafting committee	Sep 2022
Kick-off meeting of formal drafting committee	Oct 2022



Scoping	<ul> <li>identify the areas that fall under the requirements as set in the priority list, and</li> <li>should be included in a European framework</li> </ul>	
Framework guidelines	<ul> <li>specify the content of the European framework,</li> <li>the objectives and</li> <li>the principles</li> </ul>	

Throughout this scoping (and FGs drafting) phase, **ACER will consult with stakeholders**, in order to gather also their views and proposals, which will be duly considered.

Today's **stakeholders workshop** aims to provide the stakeholders with the opportunity to express their views and affect the outcome of the scoping.



Further stakeholders involvement through an ACER external **Expert group on DSF**:

- Following ACER's open call in June-July, an ad hoc expert group was established.
- It consists of 12 expert stakeholders (DSOs, TSOs, academia, market participants), and observers from the EC, DSOs, TSOs, NRAs; it is convened by two chairs (ACER and NRA representatives).
- Its aim is to provide expert input, in the form of an advice, in the ACER/NRAs' discussions during the scoping and the framework guidelines drafting.

In order to provide full transparency to the public, the composition as well as minutes of the Expert group meetings are published on ACER's dedicated webpage.

Expert group on demand side flexibility | www.acer.europa.eu







Provide your questions on the subject in the chatbox or raise your hand to express views or ask questions/clarifications.



# Scope for the new rules in accordance with the priority list

Establishment of the priority list

Requirements according to the legal basis

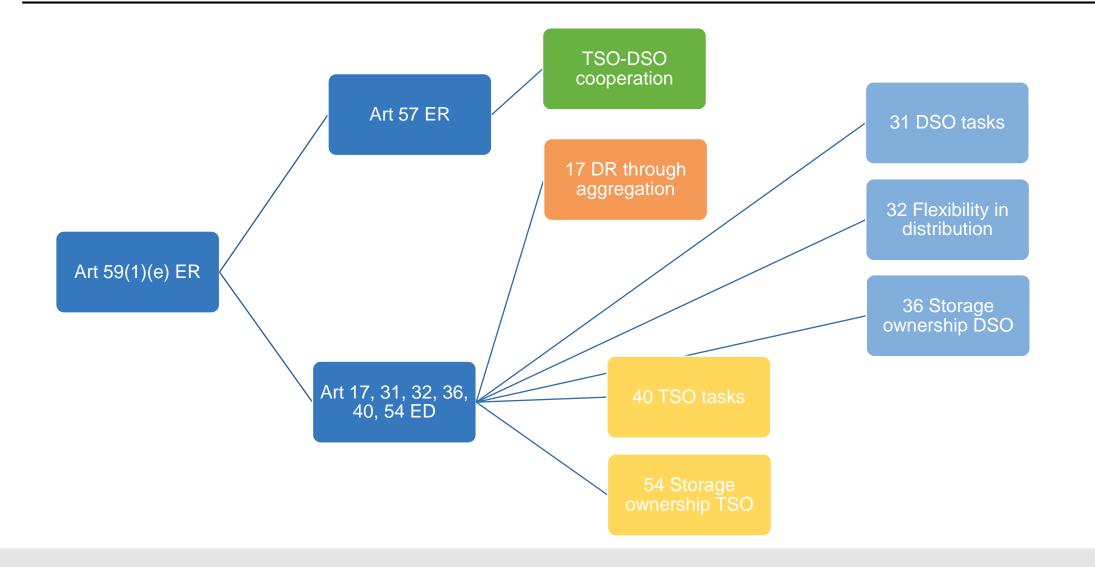
Scoping exercise



- Pursuant to Article 59(1)(e) of the Regulation (EU) 2019/943 one of the areas is "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."
- Commission Implementing Decision (EU) 2020/1479 of 14 October 2020 establishing priority lists for the development of network codes and guidelines for electricity for the period from 2020 to 2023 and for gas in 2020:
  - Recital (6): Acknowledging the responses of stakeholders and having regard to ... the <u>need for</u> <u>transparent and non-discriminatory flexibility market</u>, the priority list for electricity for 2020-2023 includes harmonised electricity rules ... on demand-side flexibility.
  - Article 1: The priority list for the development of harmonised electricity rules for the period from 2020 to 2023 shall be the following: ... (b) rules regarding **demand side flexibility**, including rules on **aggregation**, **energy storage** and **demand curtailment** rules.

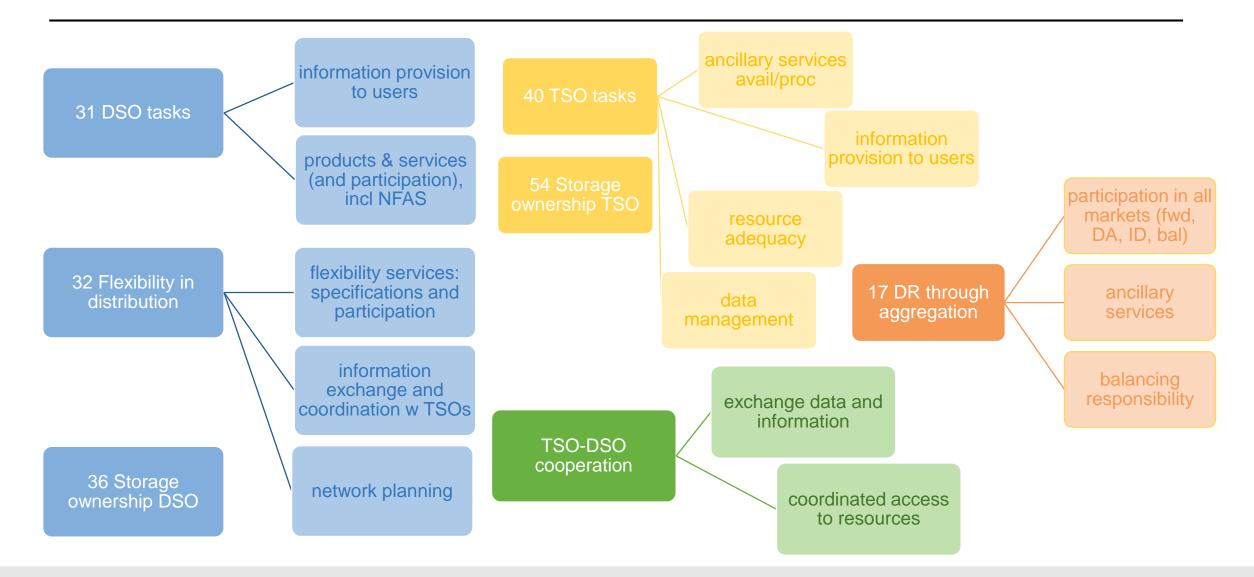


## Requirements according to the legal basis I





## Requirements according to the legal basis II

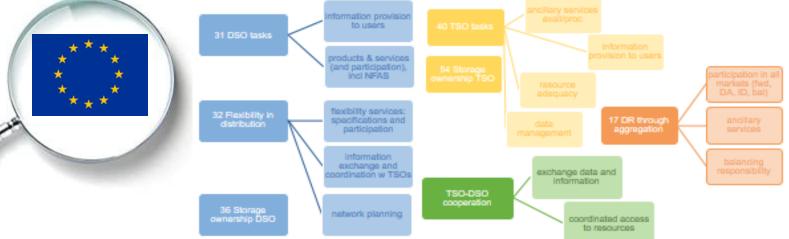




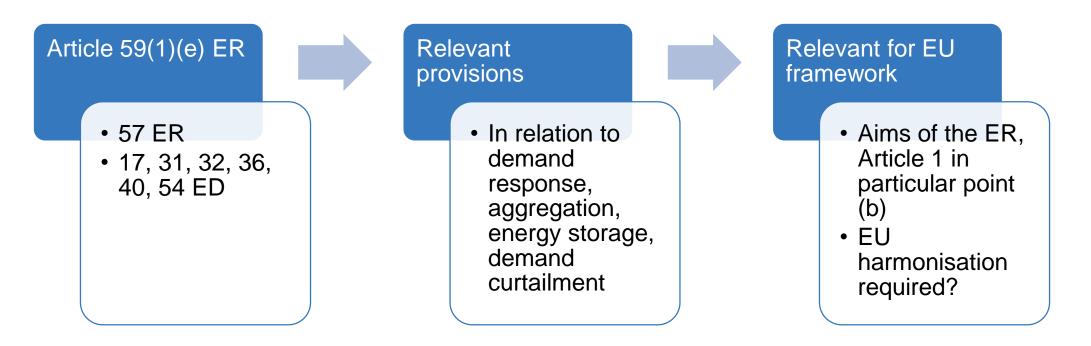
It is important to keep in mind that a European framework should respect two important European principles: **subsidiarity** and **proportionality**.

- We need to ensure that the new rules provide the minimum degree of harmonisation required to achieve the aims of the ER and in particular well-functioning, integrated electricity markets, which allow all resource providers and electricity customers non-discriminatory market access, empower consumers, ensure competitiveness on the global market as well as demand response, energy storage and energy efficiency, and facilitate aggregation of distributed demand and supply.
- Coherence with the regulatory framework set out in the existing network codes and guidelines should be ensured.

This exercise should address the part of the whole picture where crossborder aspects come in







It is important to note that the Articles used as legal basis (as included in Article 59(1)(e) ER) may direct to other Articles in the ED or ER, which should also be taken into account in the next steps of the process.



- During the scoping we need to identify which of the abovementioned areas are relevant for inclusion in a European framework.
- This includes among others:
  - the kind of products, markets and services;
  - the kind of market participants and service providers (such as loads, generation, storage; distribution connected only vs. distribution connected and transmission connected);
  - the processes required for information and data exchange;
  - the processes for the coordination between system operators and between different market timeframes.
- What this exercise is **NOT** about: the aim of the scoping is **not** to determine whether a European framework for the development of DSF should consist in the development of a new network code, in amendments of existing network codes and guidelines, or both.



- **Detail vs high-level:** it is important to note that the output of the scoping exercise will be high-level; it is inevitable to also go into details when discussing specific topics, but only to assess whether at the end the topic should be included in the scope of the new rules.
- Top-down vs bottom-up: the starting point for the scoping exercise is the legal basis of Article 59(1)(e) of the Electricity Regulation and its relevant provisions as well as of the Electricity Directive; in this way we follow a top-down approach to identify the topics to be included in the scope of the new rules, including, however, in this process, also the findings deriving from the various discussions and analyses that have been conducted so far (bottom-up approach).
- **Requirements vs implementation:** we understand that a lot of the barriers for enabling flexibility are linked to the lack of implementing specific provisions of the existing framework; although this is an important aspect, we need to ensure that we identify regulatory gaps during this process, and not not-implemented regulatory provisions.







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## Inputs from the Expert Group

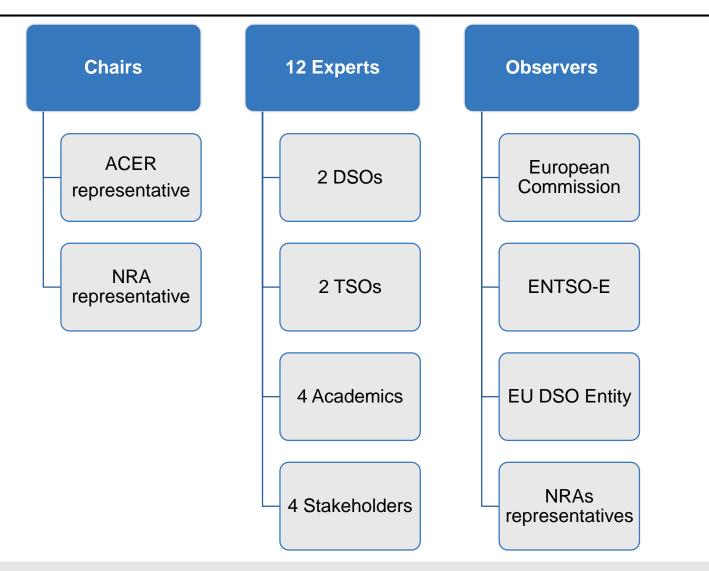
Introduction

Topics discussed in the DSF Expert Group

Finding the right level of harmonisation

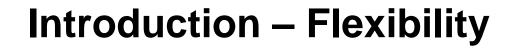


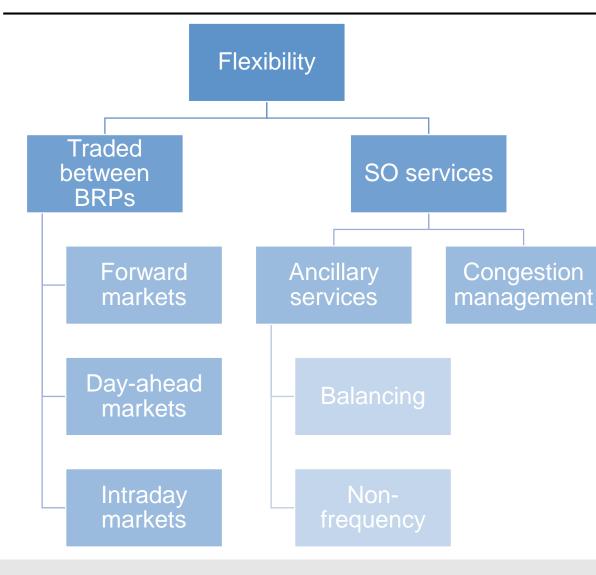
### Introduction – DSF Expert Group



- The Expert Group was based on an open call in June 2021.
- Experts appointed ad personam for their individual experience and expertise in the field.
- The Expert Group shall provide input through an advice to ACER and the NRAs in their work with the scoping face and the Framework Guideline drafting.







**Flexibility** has not been defined in the European legislative framework; several definitions have been proposed so far in the context of reports and analyses at European level.

Flexibility owned by flexibility providers can be

- a. traded in forward, day-ahead and intra-day markets between balance responsible party, and
- b. offered to cover system operators' demand for various services.



## Introduction – Grouping of topics for new rules



According to the respective provisions of the ER and the ED, the following main categories/dimensions can be identified, each with **topics** that could be relevant for inclusion in the scope of the new rules on demand side response.

Flexibility		
Traded between BRPs	SO se	rvices
Forward markets	Ancillary services	Congestion management
Day-ahead markets	Balancing	
Intraday markets	Non- frequency	

	Markets/services	Proce
igestion agement	<ul> <li>Fwd, DA, ID markets</li> <li>Balancing</li> <li>NFAS</li> <li>Congestion management</li> </ul>	<ul> <li>Participat</li> <li>Procurent</li> <li>Coordinat access</li> <li>Data mant</li> <li>Exchange provision</li> </ul>

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#### Providers/assets

- Demand response
- Aggregators
- Storage
- Distributed generation



### Introduction – Potential topics for new rules

Adequacy			****	Mork	in progress
Fwd, DA, ID markets	Baseline Aggregation model		****	VVOIR	in progress
Balancing	Prequalification Baseline Aggregation model	Validation Settlement			
Non Frequency Ancillary Services	Prequalification Baseline Aggregation model	Product specs Validation Settlement	Processes	Registry (sub)Metering data	Registry (sub)Metering data
Congestion management	Prequalification Baseline Aggregation model	Product specs Validation Settlement	Processes	Registry (sub)Metering data	Registry (sub)Metering data
Service providers / Unit types	Participation/ access	Procurement	T-D coordinated access	Data management	Exchange and provision of information



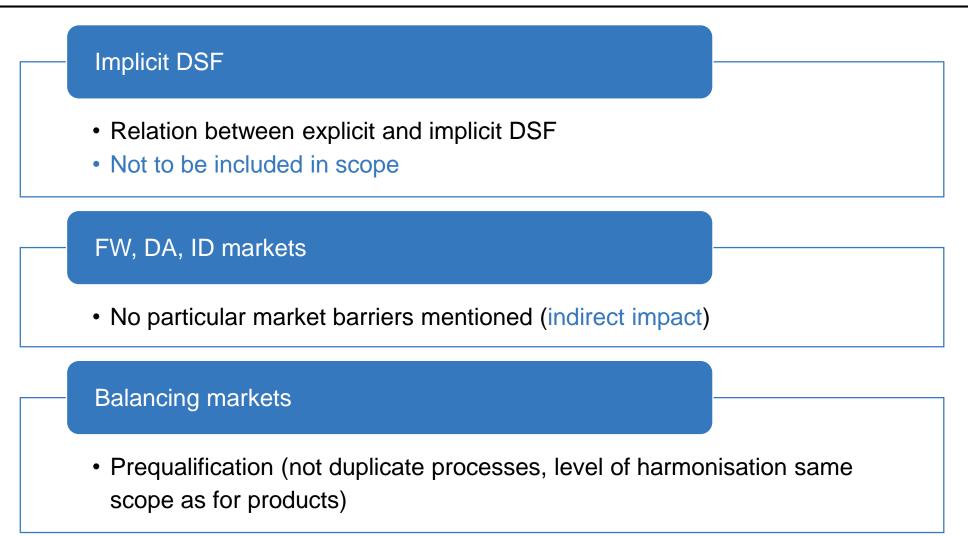
- Since September, the DSF Expert Group had 3 monthly meetings, where several topics were discussed, along the lines of the process described in the previous slides.
- During these meetings the experts have been asked several questions and expressed their concerns, views, positions, and arguments, which have been serving as input for the ACER/NRAs discussions on this topic.
- The following slides provide some of the points that were raised during these meetings, but they do
  not represent conclusions, nor they should be considered as views of ACER and NRAs on these
  topics, as the discussions are still on going.
- These points aim to trigger the discussion in today's workshop and the stakeholders are welcome to express their views, which will also be considered in the ACER/NRAs process for the scoping exercise.



What does demand side flexibility cover?

- Technology agnostic
- Cover (aggregated) consumer flexibility, storage, distributed generation, EV2G
- Voltage level distinction?
- Size of assets to be included within the definition?
- Both products tradable between market participants (BRPs) and services to SOs to be included
- Other terms may need a definition, such as congestion management (on local level) and flexibility markets







Frequency containment reserve

 Specific assets excluded in several countries – unclear whether the exclusion of smaller assets is due to technical requirements

Non-Frequency Ancillary Services

Potentially DSO-relevant

**Congestion Management** 

- Redispatching and local grid management
- Different definition/rules for different voltage levels?
- Potential main topic for harmonized European rules



Measuring, validation, settlement, baseline

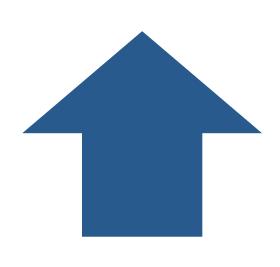
#### methodology

- Baseline methodology: harmonization does not seem to be preferable
- · Visibility, observability crucial for the development of DSF
- (Sub-) metering: roles, accuracy requirements to be adapted to product and need for granularity, interrelation with the IA on interoperability

#### Aggregation

- Portfolio management must be enabled (link with the prequalification process)
- Differentiate the markets for aggregation





European harmonization

- XB relevance
- Market integration vs. fragmentation
- Unlock flexibility by facilitating market access for international providers
- Need to adapt existing rules that were written for bigger assets
- Potential gain of harmonizing before implementing widely different models

National network codes which do not affect cross-zonal trade

- Local/regional specificities
- Different maturity levels
- Less direct interaction between local markets
- Too detailed European rules may become a barrier







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## Thank you! Any questions?



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