

**RECOMMENDATION No 01/2026  
OF THE EUROPEAN UNION AGENCY  
FOR THE COOPERATION OF ENERGY REGULATORS**

**of 19 March 2026**

**on NRAs' reporting on barriers for non-fossil flexibility**

THE EUROPEAN UNION AGENCY FOR THE COOPERATION OF ENERGY REGULATORS,

Having regard to Regulation (EU) No 2019/942 of the European Parliament and of the Council of 5 June 2019 establishing a European Union Agency for the Cooperation of Energy Regulators<sup>1</sup>, and, in particular, Article 6(2) thereof,

Having regard to the outcome of the consultation with ACER's Electricity Working Group,

Having regard to the favourable opinion of the Board of Regulators of 11 March 2026, delivered pursuant to Article 22(5)(a) of Regulation (EU) 2019/942,

Whereas:

**I. INTRODUCTION**

- (1) Article 15(1) of Regulation (EU) 2019/942 mandates ACER to monitor regulatory barriers for new entrants and smaller actors in wholesale electricity markets, including energy communities in close cooperation with the European Commission, the Member States and the relevant national authorities.
- (2) To fulfil this task, ACER first commissioned a methodological study on barriers and indicators for assessing Member States' performances in enabling market entry and participation of new entrants and small actors<sup>2</sup>. This work formed the basis for an initial EU-wide analysis of potential barriers to entry in wholesale electricity markets in 2020<sup>3</sup>. Extending the scope of the previous studies, in December 2023, ACER published a report on barriers holding back the development of demand response and

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<sup>1</sup> OJ L158, 14.6.2019, p. 22.

<sup>2</sup> [DNV study on a methodology for benchmarking the performance of the EU Member States in terms of efficient price formation and easy market entry and participation for new entrants and small actors](#), 2021.

<sup>3</sup> For more information, please refer to Chapter 7 of [ACER's 2020 Market Monitoring Report - Electricity Wholesale Markets Volume](#), 2021.

other distributed energy resources<sup>4</sup>. The report highlighted regulatory barriers and market restrictions hindering the participation of distributed energy resources (demand response, energy storage and distributed generation) in wholesale electricity markets and system operation services.

- (3) From 19 December 2023 to 2 February 2024, ACER conducted a public consultation<sup>5</sup> in accordance with Article 14(1) of Regulation (EU) 2019/942. The scope was to gather stakeholders' views on the prioritisation of strategies for overcoming barriers to demand response. Also, ACER held a workshop on 19 January 2024 to present its 2023 report on barriers<sup>4</sup> and discuss main findings.
- (4) Building upon valuable insights from the public consultation<sup>6</sup> and its previous studies, ACER launched its 2025 report on no-regret actions to remove barriers to demand response<sup>7</sup> with a refined focus on tackling the most prevalent regulatory barriers to demand response and distributed energy resources. The report called on 12 actions for governments, national regulatory authorities (NRAs), system operators and market players alike to make tangible improvements in unlocking the use of market-based flexibility.
- (5) To promote non-fossil flexibility, Article 19e(1) of Regulation (EU) 2019/943, (hereinafter “the Electricity Regulation”) requires NRAs or other national authorities or entities designated by the Member States to adopt national reports on flexibility needs assessment (‘FNA reports’). Where the Member State has designated a transmission system operator (‘TSO’) or another entity for the purpose of adopting the FNA reports, the respective NRA is required to approve or amend those reports. According to Article 19e(2)(c) of the Electricity Regulation, the FNA reports should evaluate the barriers for flexibility in the market and propose relevant mitigation measures and incentives, including the removal of regulatory barriers and possible improvements to markets and system operation services or products.
- (6) The FNA reports need to be based on data and analyses of TSOs and distribution system operators (‘DSOs’) and a common European methodology approved by ACER. On 25 July 2025, ACER adopted a decision<sup>8</sup> on the type and format of data and the methodology for TSOs’ and DSOs’ analyses of flexibility needs in each Member State (hereinafter “the FNA methodology”). To evaluate the barriers for flexibility, Article 15 of Annex I to ACER’s decision on the FNA methodology

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<sup>4</sup> [ACER report on demand response and other distributed energy resources and the barriers that are holding them back](#), 2023.

<sup>5</sup> [ACER public consultation on prioritising the removal of barriers to electricity demand response](#), 2023 – 2024

<sup>6</sup> [Prioritising the removal of barriers to demand response – ACER public consultation results](#)

<sup>7</sup> [ACER report on no-regret actions to remove barriers to demand response and unlock flexibility](#), 2025.

<sup>8</sup> [ACER Decision No 05/2025 of 25 July 2025 on the type and format of data and the methodology for TSOs’ and DSOs’ flexibility needs analysis](#), 2025.

indicates six categories of barriers based on which TSOs and DSOs can provide data for the analyses needed for the preparation of the FNA reports.

- (7) Moreover, Article 19e(7) of the Electricity Regulation tasks ACER with issuing a report analysing all national FNA reports. It also requires ACER to evaluate their findings and provide recommendations on issues of cross-border relevance, including recommendations on removing barriers to the entry of non-fossil flexibility resources. In addition, Article 15(5) of Regulation (EU) 2019/942 reiterates this obligation.
- (8) This Recommendation forms part of ACER's efforts to support the national authorities or entities in identifying barriers for non-fossil flexibility pursuant to Article 19e(2)(c) of the Electricity Regulation. To enable ACER to prepare its EU-wide flexibility report, including recommendations on removing barriers to the entry of non-fossil flexibility resources, this Recommendation seeks to promote a harmonised and coordinated approach to reporting on such barriers to the extent possible.

## **II. PROCEDURE**

- (9) On 28 November 2024, ACER proposed to the Electricity Working Group (hereinafter "AEWG") a plan for monitoring work related to demand response over the period 2025-2028. The plan included two distinct workstreams on monitoring barriers to demand response and other non-fossil flexibility resources, based on ACER's previous monitoring of regulatory barriers to new market entrants and smaller actors<sup>4,6,7</sup> and on ACER's new mandate related to the evaluation of barriers for flexibility as part of the FNA reports in accordance with Article 19e(2)(c) of the Electricity Regulation. ACER also highlighted the interrelations between these two monitoring tasks and proposed to align the publication of the relevant reports to optimise the efforts required. Finally, ACER suggested developing a Recommendation to NRAs, serving as a common template to assist the national reporting on barriers to flexibility.
- (10) On 24 April 2025, ACER further elaborated this plan and proposed to the AEWG to combine the two monitoring workstreams. The proposal included, first, the definition of barriers, indicators and related aspects to enable a harmonised evaluation and reporting at national level, starting from ACER's previous work on barriers to demand response; and second, the adoption of these barriers, indicators and related aspects in a Recommendation addressed to NRAs, in accordance with ACER's work programme<sup>9</sup>.
- (11) In developing this Recommendation, ACER engaged closely with NRAs through its Electricity Balancing Task Force for developing and reviewing the barriers, indicators

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<sup>9</sup> [ACER's Single programming document 2025-2027](#), 2024. See the strategic action area on issuing Agency recommendations (SAA.OP.02.03), 'Objective 3: Issue recommendations to NRAs on how to report on barriers to non-fossil flexibility'.

and related aspects. ACER also kept its Security of Supply Task Force informed about this process. These interactions enabled NRAs to share their experiences and ensured that NRAs had sufficient opportunity to express their views and concerns.

- (12) The AEWG was consulted from 4 February to 16 February 2026 and provided its advice on 19 February 2026.
- (13) In its advice, the AEWG asked ACER to consider the submitted AEWG comments in regard the timing and implementation of the Recommendation and endorsed the ACER draft Recommendation on NRAs' reporting on barriers for non-fossil flexibility.
- (14) On 11 March 2026, ACER's Board of Regulators issued a favourable opinion, pursuant to Article 22(5)(a) of Regulation (EU) 2019/942 on the draft Recommendation on NRAs' reporting on barriers for non-fossil flexibility.

### **III. LEGAL GROUNDS FOR THE PRESENT RECOMMENDATION**

- (15) According to Article 6(2) of Regulation (EU) 2019/942, ACER may, in accordance with its work programme, at the request of the European Commission or on its own initiative, make recommendations to assist regulatory authorities and market participants in sharing good practices.
- (16) ACER's work programme for 2025 - 2027 envisages that ACER will issue a Recommendation to NRAs on how they can best report to ACER on the barriers for non-fossil flexibility<sup>9</sup>.

### **IV. MAIN FINDINGS**

- (17) ACER's 2023 report on demand response and other distributed energy resources and the barriers that are holding them back<sup>4</sup> analysed regulatory and market design barriers to demand response and other distributed energy resources in the following areas:
  - a) Lack of a proper legal framework to allow market access;
  - b) Unavailability or lack of incentives to provide flexibility;
  - c) Restrictive requirements to providing balancing services;
  - d) Restrictive requirements to providing congestion management;
  - e) Restrictive requirements to participating in capacity mechanisms and interruptibility schemes;
  - f) Limited competitive pressure in the retail market;
  - g) Retail price interventions.

The report also briefly discussed how the following relevant barriers to market integration and additional regulatory obstacles may negatively impact the entry and participation of distributed energy resources and other new actors in electricity wholesale markets and system operation services:

- h) Insufficient cross-zonal transmission capacity;
- i) Bidding zones not reflecting structural congestions;
- j) Limited competitive pressure and/or liquidity in wholesale electricity markets;
- k) Complex, lengthy, and discriminatory administrative and financial requirements;
- l) Lack of incentives to consider non-wire alternatives;
- m) Scope for improving transparency, cost-reflectivity, and non-discrimination in network tariffs.

Finally, the report examined specific network tariff design elements that may act as potential facilitators or barriers for active customers and other types of customers providing demand response.

- (18) Stakeholders participating in ACER's public consultation<sup>5,6</sup> following the publication of ACER's 2023 report<sup>4</sup> identified the regulatory barriers listed in points (a) to (d), (k) and (l) of paragraph (17), and potential barriers related to network tariffs, as relatively more relevant to overcome<sup>10</sup>. ACER's 2025 report on no-regret actions to removing barriers to demand response<sup>7</sup> highlighted these regulatory barriers<sup>11</sup> as the most pressing bottlenecks affecting the integration of distributed energy resources – serving both as a roadmap and as a call for coordinated action by all relevant stakeholders<sup>12</sup>. The report also serves as reporting guidelines, helping to prioritise the most relevant aspects in future ACER monitoring, and allows to align and coordinate on barriers to flexibility which Member States need to report on.
- (19) With the intention to establish a basis for aligning ACER's monitoring and reporting on regulatory barriers to new market entrants and smaller actors in accordance with

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<sup>10</sup> As explained in page 13 of the public consultation results, these are the barriers to which at least half of the participants assigned a relevance score of at least 'medium-to-high'.

<sup>11</sup> With the exception of the barrier "Restrictive requirements to providing congestion management".

<sup>12</sup> As mentioned in the introduction, the report identifies 12 actions towards unlocking the use of market-based flexibility. Actions 1 to 3 relate to the barrier in point (a) of paragraph (17). Actions 4 to 7 relate to the barrier in point (b) of paragraph (17), while action 6 also refers to network tariff related aspects. Actions 8 to 10 relate to barrier in point (c) of paragraph (17). Action 11 relates to the barrier in point (k) of paragraph (17). Action 12 relates to the barrier in point (l) of paragraph (17).

Article 15 of Regulation (EU) 2019/942 with Member States' and ACER's reporting on barriers to flexibility in accordance with Article 19e of the Electricity Regulation, ACER identified the barriers highlighted in its 2025 report<sup>13</sup> as relevant for inclusion in Article 15 of Annex I to ACER's decision on the FNA methodology.

- (20) This Recommendation aims at effectively supporting this alignment. It also aims at providing a common framework to assist NRAs in performing the tasks assigned to them in accordance with Article 19e(1) of the Electricity Regulation and to enable consistent evaluations of regulatory and market design barriers to flexibility across Member States. Moreover, it enables ACER to combine its monitoring and reporting obligations related to barriers to flexibility and thereby ensuring an efficient process for both ACER and the NRAs in monitoring persisting regulatory barriers.
- (21) To achieve these goals, this Recommendation elaborates on the barriers identified in Article 15 of Annex I to ACER's decision on the FNA methodology (Section 1 of the Annex to this Recommendation) and provides guidance for their evaluation in each Member State (Section 2 of the Annex to this Recommendation). The barriers, indicators and guidance for evaluations are based on the findings of ACER's reports on barriers for new market entrants and smaller actors, including insights provided by stakeholders in the related public consultation. ACER further scrutinised the barriers by reducing the number of indicators and focusing on a simplified set of critical aspects affecting the integration of non-fossil flexibility.
- (22) Section 1 of the Annex to this Recommendation specifies a list of indicators according to which Member States can evaluate the following barriers from Article 15 of Annex I to ACER's decision on the FNA methodology:
- a) Lack of proper legal framework for market access to new entrants and small actors;
  - b) Lack of enablers and incentives to provide flexibility;
  - c) Restrictive requirements to provide balancing services;
  - d) Restrictive requirements to provide congestion management;
  - e) Complex, lengthy, and discriminatory administrative requirements;
  - f) Lack of regulatory incentives for system operators to consider non-wire alternatives.
- (23) The results of previous ACER reports and the public consultation reveal these barriers remained largely unresolved. For example, in 2022, multiple Member States did not

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<sup>13</sup> Including the barrier "Restrictive requirements to providing congestion management" and excluding the barrier related to specific aspects related to network tariff design elements.

fully open their wholesale electricity markets and system operation services to all types of distributed energy resources. Almost half of the Member States lacked at least one aggregator model in all electricity markets and market-based congestion management services<sup>4</sup>. More recently, ACER found that the availability of smart meters and time-varying or dynamic retail offers remains uneven and limited in many Member States<sup>14</sup>. In its European Grids Package<sup>15</sup>, the European Commission strengthens ACER's identification of cumbersome and lengthy administrative requirements by highlighting inefficient grid connection procedures as major obstacles to the integration of renewable generation and electrified loads.

- (24) Section 2 of the Annex to this Recommendation defines the scope of the recommended indicators and suggests aspects for their evaluation in each Member State. References to EU law and regulations provide context for the aspects used for scoping the indicators, where relevant.
- (25) In line with relevant recommendations adopted by ACER in its reports on network tariff practices and on barriers to demand response and other distributed energy resources, ACER recalls in this Recommendation that specific network tariff design aspects can, under certain conditions, act as barriers for system users to provide their flexibility and recommends national regulatory authorities to consider evaluating these potential barriers in the FNA reports.
- (26) Finally, given the short time remaining until the adoption or (amended) approval of the first FNA reports in accordance with Article 19e(1) of the Electricity Regulation, i.e. by 25 July 2026, and given that these reports are developed in cooperation with other entities such as TSOs and DSOs, ACER recognises that some FNA reports may not include, in part or in whole, the data related to the evaluation of barriers to the entry of non-fossil flexibility resources in accordance with this Recommendation. Since these data are also required for ACER's monitoring of regulatory barriers for new market entrants and smaller actors in accordance with Article 15(1) of Regulation (EU) 2019/942, it is necessary that ACER establishes a separate process to collect them from the NRAs within the cooperation framework envisaged in that Article,

**HAS ADOPTED THIS RECOMMENDATION:**

1. ACER recommends national regulatory authorities, where appropriate in coordination with other relevant national authorities and entities, to consider for the reports adopted or approved (amended) in accordance with Article 19e(1) of Regulation (EU) 2019/943, an evaluation of the following:

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<sup>14</sup> [Rewarding flexibility: How retail contract choice can help unlock consumer flexibility, ACER Retail Monitoring Report, 2025.](#)

<sup>15</sup> [Commission notice - Guidance on efficient and timely grid connections C\(2025\) 8473 final.](#)

- a) the regulatory and market design barriers to the entry of non-fossil flexibility resources and associated indicators that are found relevant and applicable for the Member States included in Section 1 of the Annex to this Recommendation; and
  - b) the potential of the following aspects of transmission and distribution tariffs to unduly restrict or disincentivize demand response or system users providing flexibility, taking into account the relevant considerations and recommendations adopted by ACER in its 2025 report on electricity network tariff methodologies in Europe<sup>16</sup> and its 2023 report on barriers to demand response and other distributed energy resources<sup>4</sup>:
    - i. network tariff basis<sup>17</sup>;
    - ii. differentiation (or lack of) in network charges between active and non-active customers<sup>18</sup>; and
    - iii. exemptions, discounts, and other differentiated tariff treatments<sup>19</sup>.
2. ACER recommends national regulatory authorities, where appropriate in coordination with other relevant national authorities and entities, to consider the aspects included in Section 2 of the Annex to this Recommendation for the evaluations under point (a) of the previous point (1) and to include the data related to all evaluations referred to in point (1), for the reports adopted or approved (amended) in accordance with Article 19e(1) of Regulation (EU) 2019/943.
  3. Where the evaluations or data referred to in points (1) and (2) cannot be considered or included, in part or in whole, for the first reports adopted or approved (amended) in accordance with Article 19e(1) of Regulation (EU) 2019/943, due to the short time remaining until the adoption or approval (amendment) of these reports, ACER recommends national regulatory authorities to provide the data related to these evaluations to ACER through a separate process, established within the framework of cooperation between ACER and national regulatory authorities in accordance with Article 15(1) of Regulation (EU) 2019/942.
  4. ACER will consider updating this Recommendation following the knowledge gained from the evaluation of barriers to non-fossil flexibility based on the first reports

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<sup>16</sup> [Getting the signals right: Electricity network tariff methodologies in Europe, ACER report on network tariff practices, 2025.](#)

<sup>17</sup> ACER considerations and recommendations, and information specific to this aspect are included in Section 5.2 of [ACER 2025 report on network tariff practices](#) and in Sections 11.5 and 12.8 of [ACER 2023 report on demand response and other distributed energy resources and the barriers that are holding them back.](#)

<sup>18</sup> ACER considerations and recommendations, and information specific to this aspect are included in Section 5.5.4 of [ACER 2025 report on network tariff practices](#) and in Sections 11.1 and 12.8 of [ACER 2023 report on demand response and other distributed energy resources and the barriers that are holding them back.](#)

<sup>19</sup> ACER considerations and recommendations, and information specific to this aspect are included in Section 5.5 of [ACER 2025 report on network tariff practices](#) and in Sections 11.4 and 12.8 of [ACER 2023 report on demand response and other distributed energy resources and the barriers that are holding them back.](#)

adopted or approved (amended) in accordance with Article 19e(1) of Regulation (EU) 2019/943, for the second round of reporting in 2028.

This Recommendation is addressed to the national regulatory authorities.

Done at Ljubljana, on 19 March 2026.

**- SIGNED -**

*For the Agency  
The Director ad interim*

V. ZULEGER

Annex – Regulatory and market design barriers and indicators to the entry of non-fossil flexibility and aspects for their evaluation

**ANNEX**

**Section 1 – Regulatory and market design barriers to the entry of non-fossil flexibility resources and associated indicators proposed for evaluation in the national FNA reports pursuant to Article 19e(1) of Regulation (EU) 2019/943**

<b>Barriers</b>	<b>Indicators</b>
Lack of proper legal framework for market access to new entrants and small actors	Main roles and responsibilities of new actors not defined
	Market access restricted due to lack of legal eligibility
	Unclear framework for access to final customer data
	Ownership restrictions for energy storage and electro-mobility
	Restrictions on trade in day-ahead and intraday markets
Lack of enablers and incentives to provide flexibility	Lack of adequate metering systems
	Absence of price signals
Restrictive requirements to provide balancing services	Non-market based balancing products
	Restrictions in the prequalification of reserve providing groups
	Large minimum eligible capacity
	Unregulated duration or long prequalification process
	Large minimum bid size
	Long validity period of balancing energy bids
	Symmetric balancing capacity products
	Restrictions in the price settlement rule of balancing energy
	Non-contracted balancing energy bids not allowed
	Too short predefined minimum duration between consecutive activations
	Long procurement lead time and long duration of balancing capacity contracts
Restrictive requirements to provide congestion management	Unjustified lack of market-based TSO congestion management
	Unjustified lack of market-based DSO congestion management
	Constraints in local markets for TSO/DSO congestion management

Complex, lengthy, and discriminatory administrative requirements	Inefficient grid connection procedures
	Disproportionate procedures and requirements for market access
Lack of regulatory incentives to system operators to consider non-wire alternatives	Lack of incentives for system operators to consider non-wire alternatives

## Section 2 – Aspects to consider for the evaluation of regulatory and market design barriers to the entry of non-fossil flexibility and associated indicators

### Barrier 1: Lack of proper legal framework for market access to new entrants and small actors

#### Indicator 1.1: Main roles and responsibilities of new actors not defined

##### Active customers

Aspects	Legal reference
1. Is all necessary primary and secondary legislation <sup>20</sup> in effect to ensure that final customers are entitled to act as active customers and exercise the following rights: <ul style="list-style-type: none"> <li>a. Consume and store electricity generated within their premises located within confined boundaries or self-generated or shared electricity within other premises</li> <li>b. Operate directly or through aggregation</li> <li>c. Sell self-generated electricity, including through power purchase agreements</li> <li>d. When they own an energy storage facility, they have the right to a grid connection within a reasonable time after the request, provided that all necessary conditions, such as balancing responsibility and adequate metering, are fulfilled</li> </ul>	Articles 2(8), 15(2)(a), 15(2)(b) and 15(5)(a) Electricity Directive <sup>21</sup>
1.1. If any primary or secondary legislation is still pending, please describe its subject and indicate when it is planned to enter into effect.	

##### Aggregation

Aspects	Legal reference
2. Please indicate if and how the following activities and actors are defined in national legislation:	Articles 2(17), 2(18),

<sup>20</sup> The term “primary legislation” refers to acts and laws formally enacted by the legislative body while “secondary legislation” refers to delegated legislation, rules, orders or any other legal instrument enacted by any regulatory authority or administrative body to help implement and enforce primary legislation.

<sup>21</sup> Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU.

<ul style="list-style-type: none"> <li>a. ‘Aggregation’, if defined differently compared to the Electricity Directive</li> <li>b. ‘Independent aggregator’, if defined differently compared to the Electricity Directive</li> <li>c. ‘Aggregator’, if defined, or ‘market participant engaged in aggregation’, if defined differently compared to the Electricity Directive</li> </ul>	<p>13(2), 13(4) and 17(3)(e) Electricity Directive<sup>21</sup></p>
<p>3. Is all necessary primary and secondary legislation in effect to ensure that final customers:</p> <ul style="list-style-type: none"> <li>a. Can conclude an aggregation contract with any market participant engaged in aggregation, without the consent of the final customer's electricity undertakings (i.e. its supplier or its BRP)</li> <li>b. When they have an aggregation contract, they are not subject to undue payments, penalties or other undue contractual restrictions by their suppliers</li> <li>c. Are not subject to discriminatory technical and administrative requirements, procedures or charges by their supplier based on whether they have an aggregation contract</li> </ul>	
<p>3.1. If any primary or secondary legislation is still pending, please describe its subject and indicate when it is planned to enter into effect.</p>	

**Energy communities**

<b>Aspects</b>	<b>Legal reference</b>
<p>4. Is all necessary primary and secondary legislation in effect to ensure that citizen energy communities:</p> <ul style="list-style-type: none"> <li>a. Can engage in generation, including from renewable energy sources, supply, consumption, aggregation, energy storage and charging services for electric vehicles</li> <li>b. Can access all electricity markets directly or through aggregation in a non-discriminatory manner</li> <li>c. Are treated in a non-discriminatory and proportionate manner with regard to their activities, rights and obligations as final customers, producers, suppliers or market participants engaged in aggregation</li> </ul>	<p>Articles 2(11)(c), 16(3)(a) and 16(3)(b) Electricity Directive<sup>21</sup></p>
<p>4.1. If any primary or secondary legislation is still pending, please describe its subject and indicate when it is planned to enter into effect.</p>	
<p>5. Is all necessary primary and secondary legislation in effect to ensure that renewable energy communities:</p> <ul style="list-style-type: none"> <li>a. Can produce, consume, store and sell renewable energy, including through renewables power purchase agreements.</li> </ul>	<p>Articles 22(2)(a), 22(2)(c) and 22(4)(e) Renewable</p>

<p>b. Can access all suitable energy markets directly or through aggregation in a non-discriminatory manner.</p> <p>c. Are not subject to discriminatory treatment regarding their activities, rights and obligations as final customers, producers, suppliers or as other market participants.</p>	<p>Energy Directive<sup>22</sup></p>
<p>5.1. If any primary or secondary legislation is still pending, please describe its subject and indicate when it is planned to enter into effect.</p>	

**Energy storage behind-the-meter**

Aspects	Legal reference
<p>6. Are energy storage facilities permitted to be combined with the following facilities and connected to the same grid access point:</p> <p>a. Facilities producing renewable energy, as "co-located energy storage"</p> <p>b. Electric vehicle recharging points</p> <p>c. Final customers' demand facilities</p>	<p>Articles 2(44d) and 20a(5) Renewable Energy Directive<sup>22</sup></p>
<p>6.1. Please explain any combinations that are not allowed, as well as any conditions or restrictions that may apply to allowed combinations (e.g. size or type of energy storage or combined facilities, restrictions to the operation of the energy storage or the combined facilities, etc.).</p>	

**Aggregation models**

Aspects	Legal reference
<p>7. Please indicate and briefly describe the aggregation model(s) with more than one balance responsible party per connection point that are implemented in your country for each wholesale electricity market<sup>23</sup> and system operation service/product:</p>	<p>Article 17 Electricity Directive<sup>21</sup></p>
<p><u>Markets and system operation services/products</u></p> <ul style="list-style-type: none"> <li>- Day-ahead</li> <li>- Intraday</li> <li>- FCR</li> <li>- aFRR</li> </ul>	

<sup>22</sup> Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources.

<sup>23</sup> Wholesale electricity markets include day-ahead, intraday and balancing markets.

<ul style="list-style-type: none"> <li>- mFRR</li> <li>- TSO congestion management</li> <li>- DSO congestion management</li> </ul>	
<p>7.1. Please indicate if any of the implemented aggregation models are not available to certain types of system users (e.g., system users connected to specific voltage levels, active customers with co-located energy storage, etc.) or are available subject to any specific conditions or restrictions.</p>	

**Indicator 1.2: Market access restricted due to lack of legal eligibility**

**Aggregation**

<b>Aspects</b>		<b>Legal reference</b>
8. Are any of the following market participants not legally allowed to participate <sup>24</sup> in wholesale markets and system operation services/products:		Articles 2(18) and 2(19)
Market participant	Markets and system operation services/products	Electricity Directive <sup>21</sup>
<ul style="list-style-type: none"> <li>- Market participants engaged in aggregation, excluding independent aggregators</li> <li>- Independent aggregators</li> </ul>	<ul style="list-style-type: none"> <li>- Day-ahead</li> <li>- Intraday</li> <li>- FCR</li> <li>- aFRR</li> <li>- mFRR</li> <li>- TSO congestion management</li> <li>- DSO congestion management</li> </ul>	
8.1. Please explain any restrictions (e.g., market participant XX is not legally eligible to access YY markets/services/products because of ZZ reasons etc.).		

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<sup>24</sup> This indicator concerns the legal eligibility of the specific actors to participate in electricity markets and system operation services. The indicator does not refer to whether the specific actors are capable of complying with the technical or financial requirements for participation. Legal eligibility means that all necessary primary and secondary legislation to allow this participation is in effect.

**Direct participation**

Aspects		Legal reference
9. Are any of the following actors not legally allowed to participate directly <sup>25</sup> in wholesale markets and system operation services:		Articles 2(25), 6, 7 and 13 Electricity Regulation <sup>26</sup>
Actor	Markets and system operation services/products	
<ul style="list-style-type: none"> <li>- Household final customers</li> <li>- Commercial final customers</li> <li>- Industrial final customers</li> <li>- Renewable producers</li> <li>- Energy storage operators</li> <li>- Citizen energy communities</li> <li>- Renewable energy communities</li> </ul>	<ul style="list-style-type: none"> <li>- Day-ahead</li> <li>- Intraday</li> <li>- FCR</li> <li>- aFRR</li> <li>- mFRR</li> <li>- TSO congestion management</li> <li>- DSO congestion management</li> </ul>	
9.1. Please explain any restrictions (e.g. actor XX is not allowed to participate directly in market YY for ZZ reasons; actors using resource/technology XX or actors combining resource/technology XX1 (e.g. renewable generation or demand) with resource/technology XX2 (e.g. energy storage) in the same facility are not allowed to participate directly in market YY for ZZ reasons, actors connected to XX network are not allowed to participate directly in market YY for ZZ reasons, etc.).		Articles 15, 16, 17, 32 and 40 Electricity Directive <sup>21</sup> Articles 21 and 22 Renewable Energy Directive <sup>22</sup>

**Indicator 1.3: Unclear framework for access to final customer data**

Aspects		Legal reference
10. Has your Member State implemented the reference model for metering and consumption data access, including the various roles, information exchanges, and procedures, in line with Article 3 of Commission Implementing Regulation (EU) 2023/1162?		Articles 3 and 4(1) Commission Implementing Regulation
10.1. If so, please indicate if the national practices on implementing the interoperability requirements and procedures for access to data are		Regulation

<sup>25</sup> Direct participation is understood as individual participation of the actor, as market participant, as opposed to participating through aggregation.

<sup>26</sup> Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity.

reported in line with Article 10 of Commission Implementing Regulation (EU) 2023/1162.	(EU) 2023/1162 <sup>27</sup>
11. If any charges are imposed by regulated entities providing data services to eligible parties for access to data, please explain how your Member State ensures that these are reasonable and duly justified.	Article 25(3) Electricity Directive <sup>21</sup>

**Indicator 1.4: Ownership restrictions for energy storage and electro-mobility**

<b>Aspects</b>	<b>Legal reference</b>
12. The Electricity Directive prohibits DSOs from owning, developing, managing or operating energy storage facilities except for specific derogations:	Articles 36(2) and 36(3) Electricity Directive <sup>21</sup>
12.1. If derogations exist to allow DSOs to own, develop, manage or operate energy storage facilities considered as either fully integrated network components or when they meet the conditions in points (a) to (c) of Article 36(2) of the Electricity Directive, please indicate the number of derogations and explain their scope (i.e. does the derogation refer to fully integrated network components or to other energy storage facilities? does the derogation refer to one or more DSOs? does the derogation refer to specific energy storage facilities?).	
12.2. If derogations for fully integrated network components exist, please indicate if any open and transparent criteria or process have been defined based on which an energy storage facility owned and operated by a DSO can qualify as a fully integrated network component.	
12.3. If derogations for energy storage facilities fulfilling the conditions in points (a) to (c) of Article 36(2) of the Electricity Directive exist, please indicate if any public consultations have been performed pursuant to article 36(3) of the Electricity Directive and whether a decision has been taken to phase out the respective DSO activities.	
13. The Electricity Directive prohibits TSOs from owning, developing, managing or operating energy storage facilities except for specific derogations:	Articles 54(2) and 54(4) Electricity Directive <sup>21</sup>
13.1. If derogations exist to allow TSOs to own, develop, manage or operate energy storage facilities considered as either fully integrated network components or when they meet the conditions in points (a) to (c) of Article 54(2) of the Electricity Directive, please indicate the number of derogations and explain their scope (i.e.	

<sup>27</sup> Commission Implementing Regulation (EU) 2023/1162 of 6 June 2023 on interoperability requirements and non-discriminatory and transparent procedures for access to metering and consumption data.

does the derogation refer to fully integrated network components or to other energy storage facilities? does the derogation refer to one or more TSOs? does the derogation refer to specific energy storage facilities?).	
13.2. If derogations for fully integrated network components exist, please indicate if any open and transparent criteria or process have been defined based on which an energy storage facility owned and operated by a TSO can qualify as a fully integrated network component.	
13.3. If derogations for energy storage facilities fulfilling the conditions in points (a) to (c) of Article 54(2) of the Electricity Directive exist, please indicate if any public consultations have been performed pursuant to article 54(4) of the Electricity Directive and whether a decision has been taken to phase out the respective TSO activities.	
14. The Electricity Directive prohibits DSOs from owning, developing, managing or operating recharging points for electric vehicles except where distribution system operators own private recharging points solely for their own use.	Articles 33(3) and 33(4) Electricity Directive <sup>21</sup>
14.1. If derogations exist to allow DSOs to own, develop, manage or operate recharging points for electric vehicles that are not solely for their own use, please indicate the number of derogations and explain their scope (i.e. does the derogation refer to one or more DSOs? does the derogation refer to specific facilities?).	
14.2. If such derogations exist, please indicate if any public consultations have been performed pursuant to article 33(4) of the Electricity Directive and whether a decision has been taken to phase out the respective DSO activities.	

**Indicator 1.5: Restrictions on trade in day-ahead and intraday markets**

<b>Aspects</b>	<b>Legal reference</b>
15. What is the smallest minimum bid size of products for trading in the day-ahead and intraday markets?	Articles 8(2), 8(3) and 8(4)
16. What is the imbalance settlement period? If this is different than 15 minutes, has the regulatory authority granted a derogation or exemption. Please explain that derogation.	Electricity Regulation <sup>26</sup>
17. Do NEMOs enable market participants to trade in energy in time intervals which are at least as short as the imbalance settlement period for the day-ahead and intraday markets?	

**Barrier 2: Lack of enablers and incentives to provide flexibility**

**Indicator 2.1: Lack of adequate metering systems**

**Low roll-out of smart meters – Lack of sub-meters and dedicated measurement devices**

<b>Aspects</b>	<b>Legal reference</b>
1. What is the percentage share of household and non-household <sup>28</sup> final customers <sup>29</sup> equipped with smart meters <sup>30</sup> ?	Article 19 Electricity Directive <sup>21</sup>
2. Are sub-meters or dedicated measurement devices <sup>31</sup> used by TSOs, DSOs, and market participants, including independent aggregators and, if defined, aggregators? a. If they are used, please explain the uses b. If they are not needed, please explain why (e.g. no need for data about specific end-uses inside final customers’ facilities, no practical use cases exist for DMDs, all metering needs are covered by main utility meters or other systems/arrangements) c. If they are not used although they are needed or could be used, please describe the needs or potential uses and explain why they are not used	Article 22 Electricity Directive <sup>21</sup>  Article 7b Electricity Regulation <sup>26</sup>

**Lack of smart meters with minimum functionalities**

<b>Aspects</b>	<b>Legal reference</b>
3. For the following minimum functionalities of smart metering systems, what is the percentage share of household and non-household final customers equipped with smart meters for which the functionality is available / in use <sup>32</sup> ?	Articles 19 and 20 Electricity Directive <sup>21</sup>

<sup>28</sup> The terms ‘household’ and ‘non-household’ customers refer to the respective terms defined in Articles 2(4) and 2(5) of Directive (EU) 2019/944.

<sup>29</sup> ‘Final customers’ refers to customers who purchase electricity for own use, as defined in article 2(3) of Directive (EU) 2019/944. ‘Share of final customers’ refers to the number of metering points of final customers.

<sup>30</sup> It is noted that NRAs are typically asked to provide such data in the data collection process for ACER’s Retail Market Monitoring Report.

<sup>31</sup> Submetering refers to the installation of additional meters downstream from the main utility meter of a final customer facility to obtain data about specific end-uses inside the facility or to allow billing of different final customers within a facility based on their individual actual use. ‘Dedicated measurement device’ or ‘DMD’ means, in accordance with article 2(78) of Regulation (EU) 2019/943, a device linked to or embedded in an asset that provides demand response or flexibility services on the electricity market or to system operators. Data from DMDs may be used for the observability and settlement of demand response and flexibility services.

<sup>32</sup> ‘Functionality is available’ means that final customers have been provided with appropriate information about the functionality and can readily access and use it, provided that all relevant technical, administrative, financial

<ul style="list-style-type: none"> <li>a. Provision of information on actual electricity consumption and actual time of use</li> <li>b. Access to non-validated near real-time consumption data at no additional cost, through a standardised interface or through remote access</li> <li>c. Access to validated historical consumption data, including visualisation, on request and at no additional cost</li> <li>d. Accounting separately for electricity fed into the grid and electricity consumed from the grid by active customers' premises</li> <li>e. Data on final customers' electricity consumption and the electricity that they fed into the grid is made available to them on request or to a third party acting on their behalf at no additional cost, through a standardised communication interface or through remote access</li> <li>f. Final customers are metered and settled at the same time resolution as the imbalance settlement period in the national market</li> </ul>	
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**Other functionalities and services enabling flexibility and demand response**

Aspects	Legal reference
4. Are there any other functionalities or ICT services, related to or supported by smart metering data, that are available to final customers in your Member State, and considered helpful for enabling demand response and customer flexibility?	N/A

**Indicator 2.2: Absence of price signals**

**Limited availability/uptake of retail electricity contracts with time differentiation and dynamic electricity price contracts**

Aspects	Legal reference
5. Do all suppliers with more than 200,000 final customers offer dynamic price electricity contracts for all types of final customers with a smart meter <sup>30</sup> ? <ul style="list-style-type: none"> <li>a. Household customers</li> <li>b. Non-household customers</li> </ul>	Article 11 Electricity Directive <sup>21</sup>

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or other requirements to be fulfilled by the final customers (which have been published) have been met. The way that the functionalities are made available (i.e. through an interface with the smart meter or as a service provided separately by the system operator supported by smart metering data) is not a criterion. 'Functionality is in use' refers specifically to 'metering and settlement at the same time resolution as the imbalance settlement period' for which 'availability' is not considered a relevant indicator, as this functionality is enabled and provided by system/market operators to final customers, without the need for some action on their side.

<p>6. What is the availability to and uptake by household and non-household customers of different types of retail electricity contracts (market-based / regulated):</p> <ul style="list-style-type: none"> <li>a. Time-of-use fixed-price, fixed-term contracts</li> <li>b. Variable price contracts with one single price that varies between quarters / months / days</li> <li>c. Variable price contracts with time-of-use pricing that varies between quarters / months / days</li> <li>d. Dynamic price contracts</li> <li>e. Hybrid contracts (i.e. contracts combining elements of fixed and variable or dynamic contracts, contracts targeting consumers with specific assets, such as heat pumps or electric vehicles, or specific consumption profiles)</li> <li>f. Other (please describe)</li> </ul> <p>Proposed metrics:</p> <p>Availability (qualitative): contract type available / not available to household and non-household customers</p> <p>Availability (quantitative): number of suppliers offering each type of contract to household and non-household final customers; number of all retail electricity contract offers available to household and non-household customers for each type of contract</p> <p>Uptake (quantitative): percentage share of household and non-household customers under different types of retail electricity contracts<sup>30</sup></p>	<p>N/A</p>
<p>7. What is the estimated percentage share of household and non-household customers under collective metering and billing schemes or similar arrangements that do not allow final customers to be exposed to time-of-use or dynamic price signals (e.g. retail contracts, network tariffs, local flexibility markets etc.)?</p>	<p>Articles 19, 21 and 22                  Electricity Directive<sup>21</sup></p>

**Lack of consideration of network tariffs with time differentiation<sup>33</sup>**

Aspects	Legal reference
<p>8. Are network tariffs with time-of-use (static or dynamic) elements applied to any customer categories connected to the transmission or the distribution system?</p>	<p>Article 18(7)                  Electricity Regulation<sup>26</sup></p>

<sup>33</sup> ACER considerations and recommendations, and information related to network tariffs with time differentiation are included in Section 6.6 of [ACER 2025 report on network tariff practices](#).

8.1. If no time-of-use signals (static or dynamic) are introduced in network tariffs for any customer types connected to the transmission or distribution system, despite the presence of physical congestion in the system and the availability of fit-for-purpose metering systems, please indicate if there was an assessment to support this decision and explain the reasons for deciding against introducing time-of-use signals in network tariffs <sup>34</sup> .	Article 18(7) Electricity Regulation <sup>26</sup>
8.2. If time-of-use signals are introduced in network tariffs, are these tariffs mandatory for network users to whom they apply (i.e. no possibility to opt-out and select a different tariff that does not include such signals) <sup>35</sup> ?	N/A
8.3. If time-of-use signals are introduced in network tariffs, are suppliers allowed to ‘bundle’ charges related to the network component into fixed electricity price contracts with no flexible elements that they may offer to customers to which time-of-use network tariffs apply <sup>36</sup> ?	N/A

### **Barrier 3: Restrictive requirements to provide balancing services**

#### **Non-market-based procedures**

##### **Indicator 3.1: Non-market-based balancing products**

For aFRR and mFRR, the indicator refers to the use of local balancing products, before starting using standard balancing products<sup>37</sup>.

<b>Aspects</b>	<b>Legal reference</b>
1. If any TSO uses non-market-based procurement for balancing capacity or balancing energy: a. For which reserves (i.e. FCR, aFRR, mFRR) and types of products (i.e. capacity, energy) is this the case?	Article 40(4) Electricity Directive <sup>21</sup>

<sup>34</sup> ACER considerations and recommendations specific to this aspect are included in [ACER 2025 report on network tariff practices](#), p. 301, 309 and 315.

<sup>35</sup> ACER considerations and recommendations specific to this aspect are included in [ACER 2025 report on network tariff practices](#), p. 299, 300 and 311.

<sup>36</sup> ACER considerations and recommendations specific to this aspect are included in [ACER 2025 report on network tariff practices](#), p. 313.

<sup>37</sup> Standard balancing products refer to products for balancing energy and balancing capacity in accordance with article 25 of the Electricity Balancing Regulation. Specific balancing products refer to products for balancing energy and balancing capacity in accordance with article 26 of the Electricity Balancing Regulation. Local balancing products refer to products for balancing energy and balancing capacity that a TSO uses before starting to use standard balancing products for a certain reserve.

<p>b. How does the TSO procure/cover its balancing needs for these reserves and what is the current planning for implementing market-based procurement?</p>	<p>Article 3(1) Electricity Balancing Regulation<sup>38</sup></p>
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**Prequalification**

For prequalification, the indicators refer to all types of products that may be used in a Member State (i.e. local or standard and specific balancing products).

**Indicator 3.2: Restrictions in the prequalification of reserve providing groups (RPGs)**

Aspects	Legal reference																				
<p>2. Do all TSOs allow prequalification of reserve providing groups for FCR, aFRR and mFRR?</p>	<p>Articles 3(9), 3(10), 3(11), 154, 155, 158 and 159 System Operation Regulation<sup>39</sup></p>																				
<p>3. For reserves where at least one TSO allows prequalification of reserve providing groups, are there any combinations of generation (G), demand (D) and storage (S) units under the same reserve providing group that are not allowed by one or more TSOs?</p> <table border="1" data-bbox="284 1070 1045 1355"> <thead> <tr> <th></th> <th>G&amp;D&amp;S</th> <th>G&amp;S</th> <th>D&amp;S</th> <th>G&amp;D</th> </tr> </thead> <tbody> <tr> <td>FCR</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>aFRR</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>mFRR</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			G&D&S	G&S	D&S	G&D	FCR					aFRR					mFRR				
		G&D&S	G&S	D&S	G&D																
FCR																					
aFRR																					
mFRR																					
<p>3.1. Please explain why certain combinations are not allowed (e.g. aggregation of XX units is not allowed in YY reserve by WW TSO for ZZ reasons) and describe any specific restrictions that may apply with regard to any allowed combinations (e.g. locational or connection voltage level restrictions, restrictions on the type or size of facilities/units that can be aggregated, etc.) and the reasons for these restrictions.</p>																					
<p>4. Are reserve providing units or reserve providing groups required to pass separate prequalification to provide balancing capacity and balancing energy</p>																					

<sup>38</sup> Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing.

<sup>39</sup> Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation.

for FCR, aFRR or mFRR? If so, please explain the reasons for requiring separate prequalification.	
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**Indicator 3.3: Large minimum eligible capacity**

Aspects	Legal reference
5. What is the minimum capacity (MW) required by each TSO in the prequalification process to be allowed to participate in the different local or standard and specific balancing products used for FCR, aFRR and mFRR?	Article 7(1) mFRRIF <sup>40</sup>  Article 7(1) aFRRIF <sup>41</sup>

**Indicator 3.4: Unregulated duration or long prequalification process**

**First time prequalification**

Aspects	Legal reference
6. If a reserve providing unit (RPU) or reserve providing group (RPG) is required to pass a first-time prequalification to provide FCR, aFRR or mFRR, what is the regulated maximum duration (weeks), if any, for the following intermediate steps of the prequalification process for each reserve? <ul style="list-style-type: none"> <li>a. From receipt of a formal application by a reserve provider, for the TSO to confirm if the application is complete</li> <li>b. From receipt of a request by the TSO for additional information, for the reserve provider to submit the additional information</li> <li>c. From confirmation of the completeness of the application, for the TSO to confirm to the reserve provider if the reserve providing unit/group has been prequalified</li> </ul>	Articles 155 and 159 System Operation Regulation <sup>39</sup>

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<sup>40</sup> Implementation framework for the European platform for the exchange of balancing energy from frequency restoration reserves with manual activation in accordance with Article 20 of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing.

<sup>41</sup> Implementation framework for the European platform for the exchange of balancing energy from frequency restoration reserves with automatic activation in accordance with Article 21 of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing.

**Re-qualification**

Aspects	Legal reference
7. If a prequalified RPG is required to pass a new prequalification process for FCR, aFRR or mFRR due to the following changes, what is the maximum regulated duration (weeks) of the re-qualification process, if any?	N/A
7.1. After adding new connection points, adding new generation/demand/storage units in the existing connection points and/or increasing the capacity of existing units or their contribution to the prequalified capacity of the RPG.	
7.2. After removing some connection points, removing some generation/demand/storage units in the existing connection points and/or decreasing the capacity of existing units or their contribution to the prequalified capacity of the RPG.	
7.3. After changes to the composition or distribution <sup>42</sup> of units.	
8. If a prequalified RPU or RPG is required to pass a new prequalification process for FCR, aFRR or mFRR due to being switched to a different BSP for the same balancing product and without having undergone any changes, what is the maximum regulated duration (weeks) of this re-qualification process, if any?	

**Product design and market architecture**

Unless indicated otherwise, indicators in this section refer to local balancing products used before starting using standard products, or to any specific products that may be used in parallel with standard products. As regards specific balancing products, the aim is to gather some basic information on the use of specific balancing products across Member States and on any differences from standard products with respect to certain characteristics that are considered relevant as potential barriers to the participation of resources such as demand response and other small distributed energy resources.

**Indicators for which information is required only in case of deviation from EU target model requirements**

9. In the table below, please provide the following information for the local or specific products that are not in line with the respective requirements:
  - a. **Indicator 3.5: ‘Large minimum bid size’**: The highest minimum bid size (MW)

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<sup>42</sup> Changes in the composition of a prequalified RPG always imply removing some connection points or units connected to these connection points while other connection points or units are added, while keeping the same prequalified reserve capacity of the RPG. Changes in the distribution of a prequalified RPG refer to changes to the connection points of the RPG or to the units connected to these connection points, while keeping the same prequalified reserve capacity of the RPG and the same technologies/features of the units the RPG consists of.

- b. **Indicator 3.6 ‘Long validity period of balancing energy bids’**: The shortest and the longest validity period
- c. **Indicator 3.7 ‘Symmetric balancing capacity products’**: If a derogation is provided to allow symmetrical procurement of balancing capacity and when this derogation expires
- d. **Indicator 3.8 ‘Restrictions in the price settlement rule of balancing energy’**: The price settlement rule applied
- e. **Indicator 3.9 ‘Non-contracted balancing energy bids not allowed’**: Indicate any deviation from EU target model requirements also for standard products, if used.

<u>In case products other than standard products are used, indicate if there are local or specific =&gt;</u>			<u>Local/ Specific</u>	<u>Local/ Specific</u>	<u>Local/ Specific</u>	<u>Local/ Specific</u>	<u>Legal reference</u>
<u>Product or market design element</u>	<u>EU target model requirement</u> <sup>43</sup>	<u>FCR</u>	<u>aFRR capacity</u>	<u>aFRR energy</u>	<u>mFRR capacity</u>	<u>mFRR energy</u>	
a. <u>Minimum bid size</u>	<u>&lt; 1 MW</u>						Article 7(1) mFRRIF <sup>40</sup> and aFRRIF <sup>41</sup>  <u>Article 5(1) SPBC methodology</u> <sup>44</sup>
b. <u>Validity period of balancing energy bids</u>	<u>15 min</u>	<u>NAP<sup>45</sup></u>	<u>NAP</u>		<u>NAP</u>		Article 53 Electricity Balancing Regulation <sup>38</sup>  Article 7(1) mFRRIF <sup>40</sup> and aFRRIF <sup>41</sup>
c. <u>Procurement of upward/downward capacity</u>	<u>Separate</u>			<u>NAP</u>		<u>NAP</u>	<u>Article 6(9) Electricity Regulation<sup>26</sup></u>

<sup>43</sup> EU target model requirements should be updated to reflect the requirements that apply to the reporting period.

<sup>44</sup> ‘SPBC methodology’ refers to the methodology for a list of standard products for balancing capacity for frequency restoration reserves and replacement reserves in accordance with Article 25(2) of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing.

<sup>45</sup> Not applicable

d. <u>Price settlement rule</u>	<u>Marginal pricing</u>	<u>NAP</u>	<u>NAP</u>		<u>NAP</u>		<u>Article 6(4) Electricity Regulation</u> <sup>26</sup>
e. <u>Non-contracted balancing energy bids</u>	<u>Allowed</u>	<u>NAP</u>	<u>NAP</u>		<u>NAP</u>		<u>Articles 16(5) and 16(7) Electricity Balancing Regulation</u> <sup>38</sup>

**Indicator 3.10: Too short predefined minimum duration between consecutive activations**

Aspects	Legal reference
10. What is the shortest and the longest minimum duration (minutes) between the end of deactivation period and the following activation defined for local or standard and specific balancing energy products used by each TSO at national level for aFRR and mFRR.	Article 25(5)(d) Electricity Balancing Regulation <sup>38</sup>

**Indicator 3.11: Long procurement lead time and long duration of balancing capacity contracts**

Aspects	Legal reference
11. Has the regulatory authority issued a decision for any of the following? <ul style="list-style-type: none"> <li>a. To grant a derogation concerning the time between contracting and provision of balancing capacity, pursuant to article 6(9) of the Electricity Regulation</li> <li>b. To grant a derogation concerning the contractual period of capacity contracts, pursuant to article 6(9) of the Electricity Regulation</li> <li>c. To approve an extension of the contractual period of the balancing capacity that is contracted more than one day ahead of delivery, pursuant to article 6(10) of the Electricity Regulation, following a derogation granted pursuant to article 6(9) of the Electricity Regulation</li> </ul>	Articles 6(9) and 6(10) Electricity Regulation <sup>26</sup>
12. What is the percentage of balancing capacity contracted within ‘X’ time before its provision, for all balancing reserves and balancing capacity products <sup>46</sup> used at national level <sup>47</sup> ? <ul style="list-style-type: none"> <li>a. One day ahead or less</li> <li>b. Between one day and one week ahead</li> <li>c. Between one week and one month ahead</li> <li>d. Between one month and one year ahead</li> <li>e. More than one year ahead</li> </ul>	
13. What is the percentage of balancing capacity contracts with a contractual period no longer than ‘X’ time, for all balancing reserves and balancing capacity products <sup>46</sup> used at national level?	

<sup>46</sup> If a derogation concerning the time between contracting and provision of balancing capacity or the contractual period of capacity contracts pursuant to article 6(9) of the Electricity Regulation, please also indicate separately the percentage of standard balancing capacity products.

<sup>47</sup> It is noted that NRAs are typically asked to provide such data in the data collection process for ACER’s Market Integration Report.

<ul style="list-style-type: none"> <li>a. No longer than one day</li> <li>b. Between one day and one week</li> <li>c. Between one week and one month</li> <li>d. Between one month and one year</li> <li>e. More than one year ahead</li> </ul>	
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**Barrier 4: Restrictive requirements to provide congestion management**

**Indicator 4.1: Unjustified lack of market-based TSO congestion management**

Aspects	Legal reference
<p>1. Please explain the main congestion management measures taken by TSOs to address physical congestions. When a TSO uses redispatching<sup>48</sup> to solve physical congestions in its transmission grid, please explain the type of procurement, i.e., market-based<sup>49</sup>, non-market-based or a combination and under which conditions the TSO applies each procurement method.</p>	<p>Articles 13(1), 13(2) and 13(3) Electricity Regulation<sup>26</sup></p>
<p>2. If a TSO uses non-market-based redispatching, please explain the reasons for applying this type of procurement:</p> <ul style="list-style-type: none"> <li>a. No market-based alternative is available</li> <li>b. All available market-based resources have been used</li> <li>c. The number of available power generating, energy storage or demand response facilities is too low to ensure effective competition in the area where suitable facilities for the provision of the service are located</li> <li>d. The current grid situation leads to congestion in such a regular and predictable way that market-based redispatching would lead to regular strategic bidding which would increase the level of internal congestion and the Member State concerned has adopted an action plan to address this congestion</li> <li>e. The current grid situation leads to congestion in such a regular and predictable way that market-based redispatching would lead to regular strategic bidding which would increase the level of internal congestion</li> </ul>	

<sup>48</sup> Article 2(26) Regulation (EU) 2019/943: ‘redispatching’ means a measure, including curtailment, that is activated by one or more transmission system operators or distribution system operators by altering the generation, load pattern, or both, in order to change physical flows in the electricity system and relieve a physical congestion or otherwise ensure system security.

<sup>49</sup> For ‘market-based procurement’, the definition included in ACER recommendation 1/2025 on the network code for demand response (article 2(7)) is used: ‘market-based procurement’ or ‘market-based mechanism’ means a procurement process for a service provision where either the selection of the service providers or the activation of the service is based on a bidding process.

<p>and the Member State concerned ensures that minimum available capacity for cross-zonal trade is in accordance with Article 16(8) of the Electricity Regulation</p> <p>f. Other (please explain)</p>	
<p>3. If a TSO uses non-market-based redispatching, please explain if this type of procurement only applies to solving physical congestions in specific grid areas or voltage levels, to specific congestion management products, to specific types of system users or technologies, time periods or other criteria.</p>	
<p>4. If a TSO uses non-market-based redispatching, please explain the assessment process to set this type of procurement, including the following aspects:</p> <p>a. Initiation: who initiated the process</p> <p>b. Evaluation: type of evaluation, scope, who made the evaluation</p> <p>c. Stakeholders involvement: how the stakeholders were involved</p> <p>d. Decision: who approved the deviation from market-based procurement</p>	
<p>5. If a TSO uses non-market-based redispatching, please explain the process to reassess whether reasons to set non-market redispatching become no longer applicable.</p>	
<p>6. If a deviation from market-based redispatching is not approved for a TSO, is there some primary or secondary legislation that needs to be approved or to enter into force in your country to ensure that the TSO can redispatch resources based on a market-based mechanism?</p>	

**Indicator 4.2: Unjustified lack of market-based DSO congestion management**

<b>Aspects</b>	<b>Legal reference</b>
<p>7. Please explain how DSOs solve physical congestions in their distribution grid. Please explain if all or some DSOs:</p> <p>a. use market-based redispatching</p> <p>b. implement non-market-based congestion management measures (e.g. non-market-based redispatching, flexible connection agreements<sup>50</sup>, interruptible network tariffs, etc.) and/or</p> <p>c. take other measures, except network reinforcement and expansion or requesting the TSO to solve the physical congestion (please explain these measures).</p>	<p>Articles 13(1), 13(2) and 13(3) Electricity Regulation<sup>26</sup> Article 32(1) Electricity Directive<sup>21</sup></p>

<sup>50</sup> Article 2(24c) Directive (EU) 2019/944: ‘flexible connection agreement’ means a set of agreed conditions for connecting electrical capacity to the grid that includes conditions to limit and control the electricity injection to and withdrawal from the transmission network or distribution network.

<p>8. If a DSO uses non-market-based congestion management, please explain the reason(s) for applying this type of procurement:</p> <ul style="list-style-type: none"> <li>a. Market-based procurement is not economically efficient</li> <li>b. Market-based procurement would lead to severe market distortions</li> <li>c. Market-based procurement would lead to higher congestion</li> <li>d. Other (please explain)</li> </ul>	
<p>9. If a DSO uses non-market-based congestion management, please explain if this type of procurement only applies to solving physical congestions in specific grid areas or voltage levels, to specific congestion management products, to specific types of system users or technologies, time periods or other criteria.</p>	
<p>10. If a DSO uses non-market-based congestion management, please explain the assessment process to set this type of procurement, including the following aspects:</p> <ul style="list-style-type: none"> <li>a. Initiation: who initiated the process</li> <li>b. Evaluation: type of evaluation, scope, who made the evaluation</li> <li>c. Stakeholders involvement: how the stakeholders were involved</li> <li>d. Decision: who approved the deviation from market-based procurement</li> </ul>	
<p>11. If a DSO uses non-market-based congestion management, please explain the process to reassess whether reasons to set non-market redispatching become no longer applicable.</p>	
<p>12. If a deviation from market-based congestion management is not approved for a DSO, is there some primary or secondary legislation that needs to be approved or to enter into force in your country to ensure that the DSO can use congestion management services based on a market-based mechanism?</p>	

**Indicator 4.3: Constraints in local markets for TSO/DSO congestion management**

<b>Aspects</b>	<b>Legal reference</b>
<p>13. If local markets for congestion management (for TSOs and/or DSOs) are operational in your country, please describe whether you have identified any barrier to entry or participation of non-fossil flexibility resources and new entrants, such as flexible renewable generation, demand response, energy storage and aggregation, in the prequalification process (if applicable), product design and/or market design, e.g.:</p> <ul style="list-style-type: none"> <li>a. Restrictions in the prequalification of service providing groups (e.g. aggregation of generation/demand/storage under the same service providing group is not allowed, locational or connected voltage level restrictions in the aggregation of different units/resources, restrictions to facilities combining different types of units/resources such as demand or generation combined with storage, unjustified or disproportionate</li> </ul>	<p>Articles 13(1) and 13(2) Electricity Regulation<sup>26</sup> Articles 31(8), 32(1) and 32(2) Electricity Directive<sup>21</sup></p>

<p>restrictions to aggregators’ portfolio management, verification/testing requirements not justified by product requirements, etc.)</p> <p>b. Restrictive product or market design requirements (e.g. long validity period of congestion management bids, increasing demand response not allowed, long procurement lead time and long duration of congestion management capacity contracts, etc.)</p> <p>c. Unjustified or disproportionate restrictions applicable to resources with limited network access, such as resources connected with flexible connection agreements.</p> <p>d. Other (please explain)</p>	
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**Barrier 5: Complex, lengthy, and discriminatory administrative requirements**

**Indicator 5.1: Inefficient grid connection procedures**

<b>Aspects</b>	<b>Legal reference</b>
<p>1. As regards the procedures to obtain a grid connection permit for renewables self-consumers, energy storage facilities (front-of-the-meter, behind-the-meter including co-located energy storage) and installation of heat pumps:</p> <p>a. Is information about the procedures provided online?</p> <p>b. Can the procedures be carried out entirely in electronic form?</p> <p>c. Can the procedures run in parallel to other required authorisations to help speed up the overall permit-granting process?</p> <p>d. Are there clearly defined deadlines for all steps of the procedures?</p>	<p>Article 16 Renewable Energy Directive<sup>22</sup></p> <p>Article 31(3a) Electricity Directive<sup>21</sup></p> <p>Paragraphs 3 and 5 Commission Recommendation (EU) 2024/1343<sup>51</sup></p>
<p>2. Do DSOs apply a simple-notification procedure for grid connections in accordance with article 17 of the Renewable Directive?</p>	<p>Article 17 Renewable Energy Directive<sup>22</sup></p>
<p>3. Do system operators publish online up-to-date information on available grid capacity for connections?</p>	<p>Article 50(4a) Electricity Regulation<sup>26</sup></p> <p>Article 31(3) Electricity Directive<sup>21</sup></p> <p>Paragraph 36 Commission</p>

<sup>51</sup> Commission Recommendation (EU) 2024/1343 of 13 May 2024 on speeding up permit-granting procedures for renewable energy and related infrastructure projects.

	Recommendation (EU) 2024/1343 <sup>51</sup>
4. Are there any measures in place to simplify grid connection procedures for renewables self-consumers, electric vehicle recharging points and for renewable generation and energy storage owned by renewable and citizen energy communities?	Paragraphs 8 and 11 Commission Recommendation (EU) 2024/1343 <sup>51</sup>

**Indicator 5.2: Disproportionate procedures and requirements for market access<sup>52</sup>**

Aspects	Legal reference
5. As regards procedures and requirements to access wholesale electricity markets and local markets for congestion management: <ul style="list-style-type: none"> <li>a. Have you identified or been made aware of any potentially unjustified differences in these procedures or requirements between new entrants and smaller actors (such as market participants engaged in aggregation, including independent aggregators, operators of energy storage, energy communities) and traditional market participants (such as producers and suppliers)?</li> <li>b. Are there any access options designed with smaller participants in mind (e.g. offering alternative collateral arrangements, reduced infrastructure requirements, proportionate market access fees, etc.)?</li> </ul>	N/A

**Barrier 6: Lack of regulatory incentives to system operators to consider non-wire alternatives**

**Indicator 6.1: Lack of incentives for SOs to consider non-wire alternatives**

Aspects	Legal reference
1. Does the regulatory framework in your country ensure that TSOs and DSOs are able to procure <sup>53</sup> flexibility services, including congestion management in their areas <sup>54</sup> , in particular from generation, demand response or energy storage facilities, as needed for an efficient and secure system operation? If no, please explain why.	Articles 31(7), 32(1) and 40(5) Electricity Directive <sup>21</sup>

<sup>52</sup> These refer to procedures and requirements to become market participant in wholesale electricity markets and in local markets for congestion management.

<sup>53</sup> The terms ‘procure’ and ‘procurement’ are meant to refer to both market-based and non-market-based procedures.

<sup>54</sup> Based on the combination of articles 31(6)-(8), 32(1) and 40(5) of the Electricity Directive, the term ‘flexibility services’ is understood to mean non-frequency ancillary services and congestion management that are necessary to ensure the efficient, reliable and secure operation of the system. For clarity, flexible connection agreements are not included in flexibility services for the purpose of assessing this indicator.

	Articles 13(1) and 13(2) Electricity Regulation <sup>26</sup>
2. Is there a legal or regulatory requirement for TSOs and DSOs to assess the procurement of flexibility services as an alternative to grid expansion when preparing the network development plans? If so, please explain the requirements (e.g. do they apply to certain types of grid expansion, do they apply to investments above a certain threshold, type of assessment, assessment criteria etc.)	Articles 32(1), 32(3) and 51(3) Electricity Directive <sup>21</sup>
3. Does the regulatory framework in your country ensure that TSOs and DSOs can fully recover the reasonable costs efficiently incurred when procuring flexibility services or investing in digitalisation of the system, including any related CAPEX or OPEX costs?	Article 18(8) Electricity Regulation <sup>26</sup> Articles 32(2) and 40(6) Electricity Directive <sup>21</sup>
4. Does the regulatory framework in your country provide incentives to TSOs and DSOs: <ul style="list-style-type: none"> <li>a. to procure flexibility services, including congestion management in their areas, in particular from generation, demand response or energy storage facilities, as an efficient alternative to grid expansion?</li> <li>b. to invest in smart grids, grid optimisation and other innovative technologies (e.g. active network management), as an efficient alternative to grid expansion?</li> </ul>	Article 18(8) Electricity Regulation <sup>26</sup> Article 32(1) Electricity Directive <sup>21</sup>
5. If incentives are provided, please explain: <ul style="list-style-type: none"> <li>a. The type of incentives (e.g. expenditure allowances, TOTEX approach, cost efficiency targets, performance targets, reward/penalty schemes, benefit sharing schemes, etc.)</li> <li>b. The main purpose of the incentives (e.g. establish sandbox or pilot applications, increase system observability and digitalisation, promote efficient system utilisation, increase overall system efficiency, address CAPEX bias, etc.)</li> <li>c. In which year were the incentives introduced?</li> <li>d. How would you assess the results of the incentives so far?</li> <li>e. If there are limited or no positive results, what are the main factors to which you would attribute this?</li> </ul>	N/A