

Public consultation on flexibility needs assessment methodology

A Eurelectric response paper

December 2024

Eurelectric represents the interests of the electricity industry in Europe. Our work covers all major issues affecting our sector. Our members represent the electricity industry in over 30 European countries.

We cover the entire industry from electricity generation and markets to distribution networks and customer issues. We also have affiliates active on several other continents and business associates from a wide variety of sectors with a direct interest in the electricity industry.

We stand for

The vision of the European power sector is to enable and sustain:

- A vibrant competitive European economy, reliably powered by clean, carbon-neutral energy
- A smart, energy efficient and truly sustainable society for all citizens of Europe

We are committed to lead a cost-effective energy transition by:

investing in clean power generation and transition-enabling solutions, to reduce emissions and actively pursue efforts to become carbon-neutral well before mid-century, taking into account different starting points and commercial availability of key transition technologies;

transforming the energy system to make it more responsive, resilient and efficient. This includes increased use of renewable energy, digitalisation, demand side response and reinforcement of grids so they can function as platforms and enablers for customers, cities and communities;

accelerating the energy transition in other economic sectors by offering competitive electricity as a transformation tool for transport, heating and industry;

embedding sustainability in all parts of our value chain and take measures to support the transformation of existing assets towards a zero carbon society;

innovating to discover the cutting-edge business models and develop the breakthrough technologies that are indispensable to allow our industry to lead this transition.

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Submitted to Public Consultation on Flexibility Needs Assessment Methodology
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Introduction

1 What is your name?

First Name:
Christian

Last Name:
Gruber

2 What is your email address?

Email:
cgruber@eurelectric.org

3 What is your organisation?

Organisation:
Eurelectric

What is your affiliation? :
Other

4 I want my answer to remain anonymous. If you tick this box, we will publish your comments but we will not publish your name and organisation.

I want my answer to remain anonymous :
No

5 Privacy Policy

I agree to ENTSO-E's Consultation Hub Privacy Policy:
Yes

Feedback on Articles between Art (01) to Art (06)

6 Do you have any comments on Article 01 - Subject Matter?

Your comments:

No comments.

7 Do you have any comments on Article 02 - Definitions?

Your comment:

Definitions should align with the Network Code on Demand Response (NCDR) that is currently ongoing and with an expected proposal to be delivered by ACER to the European Commission by March 2025.

- The definition of "local services" is foreseen in the NCDR with slight differences when compared to the one hereby provided, and should not be part of this document.
- For the definition of 'flexibility network needs', we need to specify measurement units (e.g., GW for upward/downward activation of electricity fed)
- Existing permanent Flexible Connection Agreements (FCAs) should be considered in assessing net network needs, as they may reduce flexibility requirements in areas with connected flexible customers. New FCAs should also be included if appropriately designed, ensuring their contribution is measurable.

8 Do you have any comments on Article 03 - Roles and responsibilities?

Your comments:

It should explicitly include a reference to the cooperation between ENTSO-E and the EU DSO entity, as referenced in Article 19e(5) of Regulation (EU) 2019/943. It is essential to ensure consistent application of the methodology across all Member States and to facilitate effective coordination between system operators. By strengthening collaboration between TSOs, DSOs, and ENTSO-E, the methodology can be implemented in a more cohesive and efficient manner.

Additionally, the article could include an additional paragraph outlining general governance principles to address instances where TSO or DSOs fail to comply with the provisions foreseen in paragraph 2 of this article. It could also emphasize the importance of coordination, particularly between

neighboring TSOs, in matters related to interconnection investments and flexibility.

9 Do you have any comments on Article 04 - Confidentiality obligations?

Your comments:

We recommend that this article undergoes thorough consistency and legal reviews by the relevant legal experts to ensure alignment with existing legal frameworks. Specifically, it should be designed to integrate and build upon the established processes in various Member States, ensuring that it complements current legal and operational practices if needed.

10 Do you have any comments on Article 05 - Data needed to run the analysis – General provisions?

Your comment:

Article 5(4) mentions interpolation and/or extrapolation for missing data but lacks explicit guidance on these calculations. We recommend including clear methodologies and consulting stakeholders to verify results and ensure system-wide consistency.

Accurate, updated data is vital, as DSOs derive base cases from consumption scenarios aligned with TSOs and national policy targets.

ERAA is insufficiently sensitive to stress scenarios like non-existent Net Transfer Capacity (NTC) or extreme climate conditions, which affect adequacy assessments.

Data must match the evaluation scope for TSOs or DSOs, particularly for RES surplus and curtailment. The article should also address cross-border flexibility and interconnections, not solely national analyses.

Clarify that the 5-10 year timeframe in paragraph 2 is a minimum range under IEM Regulation.

Finally, adequacy assessments for distribution systems should use local load profiles, which may differ from those at the transmission level.

11 Do you have any comments on Article 06 - Needs covered – General provisions?

Your comment:

There is no clear definition of how flexibility needs should be calculated across timeframes (e.g., hourly, daily, seasonal). Allowing SOs some freedom in determining these needs is appropriate, enabling tailored assessments for specific network conditions.

However, to ensure consistency and comparability, Articles 6(3) and 6(4) should provide more specific calculation methods. Without clarification, there is a risk of inconsistent computations between Member States, hindering cross-border comparability for market participants. Misinterpretation is also possible, such as overlooking that flexibility needs across timeframes are not additive and may be addressed by the same asset.

Public consultation at the national level is crucial to incorporate market participants' input in sensitivity analyses, implementation roadmaps, and ensuring consistency in DSOs' analyses.

Feedback on Articles between Art (07) to Art (12)

12 Do you have any comments on Article 07 - System needs – General provisions?

Your comment:

Indicators developed in Articles 8, 9 and 10 could be redundant between them and with the adequacy analysis (ERAA/NRAA). NRAs must decide the approach to tackle to perform the flexibility assessments at national level for the sake of efficiency and robustness of the assessments made.

Notwithstanding the above, the table in Article 7(2) should include provisions for using a flow-based network representation, going beyond the current Net Transfer Capacity (NTC) approach. In countries where flow-based market coupling (FBMC) is applied, TSOs should directly provide values that define the FBMC domain, rather than relying on NTC values. Additionally, it should be recognized that the net capacity of assets, both centralized and decentralized, can evolve throughout the year due to changes in availability.

13 Do you have any comments on Article 08 - System needs – RES integration?

Your comment:

Article 8(1) should clarify how the "indicator for RES generation curtailment" is calculated across Member States to ensure consistency, as uniform input data (e.g., ERAA) does not guarantee consistent methodologies.

Article 8(3) requires more detail on computing seasonal, weekly, and daily indicators.

FNAs in Article 8(4) should not set new RES curtailment objectives beyond those in the RED, which focus on renewable generation in final consumption. It is unclear whether discrepancies between RES trajectories and objectives should prompt flexibility development or adjustments to trajectories, and which is more cost-effective.

Article 8(5)'s "dummy flexibility variables" resemble storage assets, contradicting technological neutrality. Without economic specifications, optimisations lack relevance. Flexible assets should be market-operated, the proposed approach risks inefficiency.

Article 8 should also address RES curtailment from intra-zonal constraints or redispatch.

14 Do you have any comments on Article 09 - System needs – Ramping needs?

Your comment:

We recommend considering only the truly inflexible part of residual demand. The "basic" definition of residual demand, which simply subtracts total RES generation from demand, overlooks that a significant portion of RES generation is flexible downwards and upwards.

15 Do you have any comment on Article 10 - System needs – Short-term flexibility needs?

Your comment:

Clear definition of 'short-term flexibility needs' is missing. It should be clarified how the percentiles (0.1 and 99.9) are defined and to assess how different values would impact system costs and consumer prices.

Assumptions about "non-dispatchable power" in paragraph 1 should be avoided, as the target model includes full RES participation in balancing services. Instead, measures to convert non-dispatchable units to dispatchable should be considered.

The current approach sums prediction errors for wind, solar, and non-dispatchable power, but correlations between errors should be considered, as they may offset each other. The preferred methodology is the assessment of balancing needs procurement, as per Article 10(4)(a), with regulatory scrutiny of flexibility barriers. A TSO should apply this approach only in justified cases (e.g., isolated systems). Short-term flexibility needs cannot be measured on an asset basis, as aggregation promotes synergies among technologies.

16 Do you have any comments on Article 11 - DSO flexibility network needs (DFNN)?

Your comment:

Paragraph 3b(iii) references encompassing generation forecasts. Each DSO must have the freedom to assess whether the forecasted generation should be considered taking into account the nature of the generation and the probability of same being available to address the local congestion.

When referring to the spatial granularity of a DSO, it should be referred to the DSO control area.

17 Do you have any comments on Article 12 - TSO network flexibility needs?

Your comment:

This provision is already foreseen in Articles 8(6), 9(6) and 10(6). Those requirements must be guided by the relevant NRA, not left to the sole consideration of TSOs/DSOs.

Given their role in managing transmission networks, TSOs have clear visibility into congestion issues and their causes. Therefore, there is no justification for not systematically identifying potential flexibility needs at the TSO level. This assessment should always be made and not just where deemed necessary.

Feedback on Articles between Art (13) to Art (17)

18 Do you have any comments on Article 13 - Delegation - DSOs?

Your comment:

According to Article 19e(1) of the Electricity Regulation, "the regulatory authority or another authority or entity designated by a Member State shall adopt a report on the estimated flexibility needs." Member States are responsible for ensuring the report is prepared and submitted in compliance with the Regulation (including its timing, process, and content), even where tasks are delegated to system operators.

19 Do you have any comments on Article 14 - Guiding criteria?

Your comment:

No comments - no text is proposed in the draft methodology published on the 8th of November 2024.

20 Do you have any comments on Article 15 - Derogations?

Your comment:

No comments - no text is proposed in the draft methodology published on the 8th of November 2024.

21 Do you have comments on Article 16 - Implementation of the regulation at national level ?

Your comment:

The current proposal in Article 16 allows only two months for the designated regulatory authority or entity to analyse the data and finalize the report. Additionally, incorporating a stakeholder consultation phase on the results would enhance transparency and robustness in the process. The timeline proposed is insufficient and could jeopardize the quality and timely delivery of the report.

22 Do you have any comments on Article 17 - Updates/refinements of the methodology?

Your comment:

The proposal should be submitted jointly by ENTSO-E and the EU DSO Entity and subject to public consultation as for the initial methodology.

General feedback

23 Do you have any general feedback on the draft methodology?

General feedback:

- The draft suggests flexibility needs for daily, weekly, and seasonal timeframes, but these needs may overlap, with the same assets fulfilling flexibility requirements across multiple timeframes. This should be addressed to avoid inefficiencies.
- There is concern about the draft's lack of clarity, as it mainly reflects SOs' views without providing clear guidance. This could lead to inconsistent approaches among Member States, undermining the European objective of a unified flexibility framework.
- A designated national entity should organise data collection from TSOs and DSOs according to the approved methodology. A standardized table should be developed, and Member States should be legally required to complete these tables on time to ensure consistency and comparability.
- In the explanatory document it is only foreseen a public workshop in mid-January and a public consultation in April, before submission to ACER. However, the legal text is incomplete (cf. Articles 14 and 15) and ENTSOE/DSO Entity explain in this consultation that they seek early input while improving the text at both technical and legal level. Another formal interaction via a public consultation will be appreciated once this proposal is refined.
- RED III mandates that the share of energy from RES in the EU's gross final energy consumption in 2030 is at least 42.5%." To achieve this target , RES integration must prioritise contributions to final energy consumption. Flexibility needs assessments should therefore focus on the share of renewables in final energy use, enabling a higher RES share in electricity if fossil-fuel consumption shifts to electricity.
- Effective RES integration requires increased electricity demand. Storing renewable surpluses is ineffective without sufficient demand. Thus, we propose that the methodology include criteria to express flexibility needs in terms of new flexible demand, which inherently supports renewable integration.

Eurelectric pursues in all its activities the application of the following sustainable development values:

Economic Development

- Growth, added-value, efficiency

Environmental Leadership

- Commitment, innovation, pro-activeness

Social Responsibility

- Transparency, ethics, accountability



Union of the Electricity Industry - Eurelectric aisbl
Boulevard de l'Impératrice, 66 – bte 2 - 1000 Brussels, Belgium
Tel: + 32 2 515 10 00 - VAT: BE 0462 679 112 • www.eurelectric.org
EU Transparency Register number: [4271427696-87](https://ec.europa.eu/transparency/regexp1/index.cfm?do=entity.entityDetail&id=4271427696-87)