# Unlocking demand-side flexibility through a consumer-centric revision of the EU Electricity Market Design

## smartEn Position Paper and suggestion for Amendments

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## Introduction

On 14 March 2023 the European Commission proposed a revision of the EU electricity market design to boost the system integration of renewables, better protect consumers and enhance industrial competitiveness. This was deemed necessary as the result of price spikes occurring since the end of 2021 and throughout 2022 due to economic growth after the global pandemic and the war in Ukraine.

The EU legislative proposal to revise both the Electricity Directive and Regulation introduced in 2019 does not undermine the fundamentals of the EU electricity market design, but further complements them with a wide variety of measures to empower consumers and reward them for being flexible in their consumption.

This Position Paper is addressed to EU co-legislators (European Parliament and Council) to outline smartEn recommendations on how to improve the following key provisions included in the proposal by the European Commission:

- Electricity Regulation
  - Article 7a - Peak shaving product
  - Article 7b - Dedicated metering device
  - Article 8 - Trade on day-ahead and intraday markets
  - Article 18 – Charges for access to networks, use of networks and reinforcement
  - Article 19c - Assessment of flexibility needs
  - Article 19d - Indicative national objective for demand side response and storage
  - Article 19e - Flexibility support schemes
  - Article 19f - Design principles for flexibility support schemes

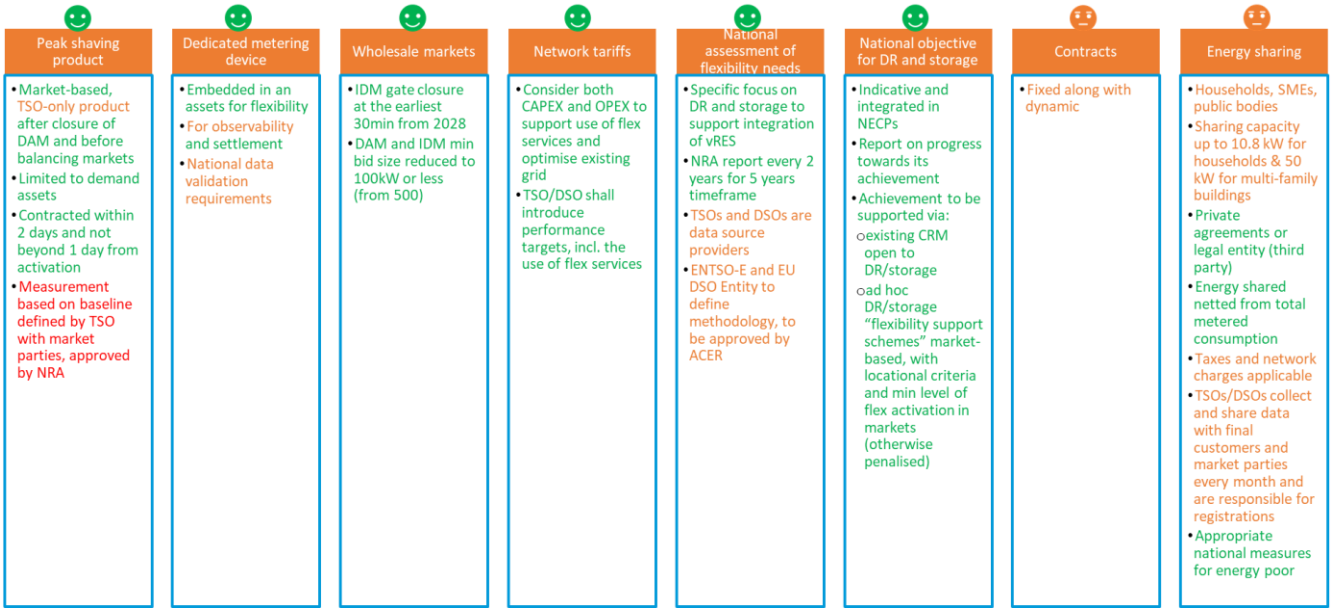
- Electricity Directive
  - Article 11 - Entitlement to a fixed term, fixed price and dynamic electricity price contract
  - Article 15a - Right to energy sharing

## RECOMMENDATIONS ON SELECTED ARTICLES

smartEn welcomes the legislative proposal by the European Commission for the following reasons:

- It introduces a wide variety of measures to stimulate both the deployment of flexible assets (GW) at the demand-side and the activation of their flexibility potential (GWh). Hence the legislative proposal is broader than expected and not limited to long-term security for investments into large-scale clean generation;
- It adopts a pragmatic approach by introducing new requirements without undermining the fundamentals of the EU electricity market design;
- It was developed pretty rapidly but in an inclusive way, integrating inputs by stakeholders after a careful consideration, although in the absence of a fully-fledged Impact Assessment.

Combined with **the correct and immediate implementation of provisions on demand side flexibility, included in the 2019 EU electricity market design framework** and not revised in this proposal, , smartEn believes that this legislative proposal has the potential to further protect, empower and reward consumers for their contribution to a cost-effective clean energy transition.




- Good provision
- To improve
- To oppose

The following chapters provide a detailed overview of smartEn recommendations for improvement of key articles in both the Electricity Regulation and Electricity Directive.

An Annex translates smartEn recommendations into amendments of the Commission's text to inspire the positions of both the European Parliament and Council.

## REVISION OF THE ELECTRICITY REGULATION

### Article 7a - Peak shaving product

smartEn welcomes this proposal as a way to transform the 5% reduction in peak electricity demand from an emergency measure limited to the period December 2022/March 2023 to a structural, market-based feature to activate demand shedding, shaving and shifting.

However, the following improvements are necessary:

- Do not limit this product to TSOs

While the Council Regulation setting the emergency measure allowed a broad spectrum of implementation methods, as outlined in smartEn Guideline[1], with this proposal the Commission decides to narrow down peak electricity reductions only through a TSO product. We regret this choice and believe both TSOs and DSOs should be entitled to shape and have access to this product allowing it to serve different purposes, including solving local congestion. It is already happening at DSO level in Ireland's Beat the Peak scheme.

- Clearly specify the aim of peak shaving

Peak hour is defined by the Commission as an hour with high consumption combined with low level of electricity generation – i.e. hours with high prices. However, peak shaving products could also be a means of local flexibility to ensure the grid can accommodate the generation of renewable energy. We suggest to clarify that both uses are considered.

- Ensure value stacking and avoid exclusive activation of demand-side assets by TSOs

We envisage the risk that some TSOs would limit activation of flexible assets to this specific TSO product. This would limit value stacking, the provision of different services by the same demand-side assets and participation to different markets, including DSOs' local flex markets, other TSOs' services and spot markets. To avoid this scenario, it would be important to explicitly mention that this market-based product should not exclude participating assets to access other TSOs, DSOs and wholesale markets and ensure TSO-DSO coordination.

- Adopt a more agile, but equally reliable baseline method

The proposed measurement method, based on a methodology set top-down by TSOs, risks to delay implementation and keep the existing stalemates. smartEn suggests a forward-looking approach, equally reliable, relying on the "dedicated metering devices" proposed in Article 7b: the supplier or aggregator (i.e. market parties) should be responsible for defining the consumer's baseline based on data from the boundary smart meter or any other certified sub-meter (i.e. the "dedicated metering device") that the supplier or aggregator can provide. An ex-post verification of delivery is performed by comparing actual consumption to the baseline. The baseline methodology proposed by market parties should be approved by the NRA and measurements can be independently verified, for example through audits. This verification can attest the activation during the relevant peak periods.

### Article 7b – Dedicated metering devices

smartEn welcomes the inclusion of dedicated metering devices, or otherwise named "sub-meters", as an alternative to the T/DSO-issued smart meters. This will help facilitate the activation of flexibilities in countries where smart meters are not yet available, enabling consumers and prosumers to offer

[1] https://smarten.eu/wp-content/uploads/2022/11/Final-Electricity-peak-demand-reduction-target-adopted.pdf

flexibility from individual assets of their choice and it will provide a more accurate and granular measurements of the consumers' flexible activity.

However, the following improvements to the article are necessary:

- Define the purpose of the dedicated metering devices

It should be to the discretion of the customer and flexibility service providers supporting consumers in the automated activation their flexibility to decide whether or not to put their dedicated metering devices to use, not the System Operator.
We also believe that including "observability" for system operators in the purpose of dedicated metering devices can be burdensome for them (due to the volume of additional data to manage) and unnecessary for the function served by dedicated metering devices, as experience in the UK has already demonstrated. Their main purpose should be providing enhanced measurement for the settlement of flexibility services, providing a granular and accurate measurement of the assets' activation, notably by relying on the support of market parties, including aggregators. Allowing access and control over dedicated metering devices would also be out of the responsibilities of the system operator. For observability reasons, they can still rely on the boundary meters and grid sensors which are their responsibility.

- Introduce an EU framework for certification and a third-party audit process

To ensure EU consumers have access to the same quality of metering devices across the EU, and to facilitate mutual recognition and free move of goods in the EU, a common framework for certification of dedicated metering devices should be introduced. Once certified, any device of a certified device type should be accepted in any Member State, in order to minimise heavy processes for market access.

- Require a EU harmonised data validation process

The Commission's requirement to establish national requirements for a dedicated metering device data validation process would lead to 27 heterogeneous schemes which will undermine the foundation of a common European energy data space. smartEn would recommend shaping an Implementing Act to define EU harmonised data validation process, building on the experience of the Expert Group 1 of the Smart Grid Task Force and ensuring coherence with both the Implementing Act on data access for demand response and the Network Code for demand response (both currently in development).
As part of this EU harmonised data validation process, market players should be allowed to define the consumer's baseline based on data from certified dedicated metering devices. In addition, and to guarantee transparency and reliability of the measurements, a third-party certification should be introduced to verify the baseline, as well as to conduct ex-post verification of data delivery. This would avoid any risks of gaming, and of conflicts of interest.
For an example of the use of baseline methodologies, please refer to the recommendation related to the peak shaving product.

## Article 8 - Trade on day-ahead and intraday markets

smartEn welcomes the possibility for market participants to trade energy as close to real time as possible and at least up to the intraday cross-zonal gate closure time, including the intraday cross-zonal gate closure time at the earliest 30 minutes ahead of real time by 1 January 2028. Market closure approaching real time stresses the importance of market coordination (including wholesale markets) in order to ensure value stacking, as described as a preferred option in the Demand Response Framework Guideline.
smartEn also supports the reduction of the minimum bid sizes to 100kW or less for trading in day-ahead and intraday markets, to reduce barriers for the participation of small decentralised assets to participate to spot markets.

As the existing threshold of 500kW is not implemented across Europe[2], we urge the Commission to carefully monitor the implementation of this new rule as well as all other requirements to ensure participation of demand to wholesale markets, as foreseen already by the 2019 EU Electricity Market Design[3].

We regret that this explicit threshold is mentioned just for wholesale markets as it should be applicable to any market, including DSOs' local flexibility markets and TSOs' ancillary services and peak shaving products.

## Article 18 – Charges for access to networks, use of networks and reinforcement

smartEn welcomes the improvements on tariff methodologies to consider both capital and operational expenditure. An equal consideration of both CAPEX and OPEX will provide appropriate incentives to system operators to support the use of flexibility services, efficient investments including grid digitalisation, solutions to optimise the existing grid and facilitate demand response.
smartEn also support the clarification that such requirements apply to both transmission and distribution tariff methodologies and the obligation (from a voluntary opportunity) to introduce grid performance targets, including for the use of flexibility services.

We also support the new requirement to ensure incentives for efficient investments in networks, including on flexibility resources and flexible connection agreements. In this light, smartEn encourages system operators to explore both "capacity buy-back" and "capacity cap" (or firm/non-firm) network access models and to share experience across Europe on the benefits of non-firm models[4] which rely on an active market-based management of the grid while ensuring connections for all consumers.

## Article 19c – Assessment of flexibility needs

smartEn welcomes the introduction of a new requirement to assess and quantify system flexibility needs as it is currently not done systematically across Europe (Belgium TSO Elia being an exception). As stressed several times by ACER, EU system flexibility needs will increase threefold by 2050: the European power system needs to face this evolution while supporting business models that can manage a more variable energy system, notably by activating the flexibility from the demand-side.
This proposal is also an important tool to assess grid reinforcement needs through non-wire alternatives and to address locational needs in an accurate manner. This will reduce or at least defer grid expansion and grid operation costs.

However, the following improvements to the article are necessary:

- Include market participants as crucial data and analytics providers

While TSOs and DSOs should be an integral part in the assessment of the grid's flexibility needs, they risk providing a biased vision, based on their experience with traditional sources of flexibility, i.e. generation or competing solutions like network reinforcements. This can be seen in numerous similar exercises like the European Resource Adequacy Assessment (ERAA). To have an accurate vision of the electricity system, its needs and available resources, any such exercise needs to include market participants, and in particular providers of demand-side flexibility services. This is in particular true when analysing the potential of demand side response, vehicle-to-grid and storage for fulfilling the grid's flexibility needs. System operators lack the knowledge and experience to assess the potential demand-side resources and the flexibility they can provide. This is especially true for the "hidden

[2] https://smarten.eu/report-the-implementation-of-the-electricity-market-design-2022-smarten-monitoring-report/
[3] https://smarten.eu/wp-content/uploads/2022/10/Joint-letter-to-implement-the-Electricity-Market-Design-now.pdf
[4] https://smarten.eu/wp-content/uploads/2022/12/FINAL-smartEn_EMD_PositionPaper-1.pdf (see page 11)

flexibilities", i.e. assets that are not visible to system operators as potential resources of demand-side flexibility until the needs arise. Flexibility service providers, like aggregators, will be able to identify these flexible assets through their regular business practices, and hence should be included in exercises that analyse flexibility needs and available flexibilities.

- Introduce a EU harmonised data format for the methodology

Experience with similar exercises, like ERAA, have shown that relying on individual system operators to provide data in their own formats can create incomplete and inaccurate modelling and assessment exercises. For this reason we recommend that the assessment of flexibility needs is based on a standardised data provision methodology that unifies formats, data sets and timelines for their provision. To guarantee accurate representation, the development of this methodology should take relevant stakeholders into consideration.

- Ensure alignment with ERAA

The implications of these national assessments of flexibility needs should be also integrated in ERAA methodology.

- Clarify the geographical scope of the quantification of flexibility needs

It is unclear whether the assessment for flexibility needs should consider flexibility for peak shaving, adequacy and/or local flexibility as a grid service. The need for local flexibility shall also be in the scope of this assessment, and it should be aligned with the DSO network development plans described in art. 32 of the Electricity Directive and the TYNDP.

- Consider the batteries in V2X as storage

With the uptake of e-mobility, a vast majority of batteries placed on the European markets will be in electric vehicles. These batteries can provide huge amounts of flexibility if the vehicles are vehicle-to-grid enabled. Any assessment of flexibility needs must include V2G enabled vehicles.

## Article 19d - Indicative national objective for demand side response and storage

smartEn welcomes the inclusion of a national objective for demand side response and storage in the National Energy and Climate Plans.
However, the following improvements to the article are necessary:

- Make the achievement of the national objective for demand response and storage mandatory

The Commission's proposal requires Member States to set this objective, but its achievement is not mandatory. This undermines its relevance and the opportunity for the Commission to open infringement proceedings.

- Consider both available capacity and flexible activation

The national objective should help quantify, track progress and define milestones for both deployment of flexible demand assets (GW) and their activation (GWh). Limiting to a capacity target would undermine the contribution of demand response and storage to the system flexibility needs. In this light, the objective should consider demand-side flexibility for peak shaving, adequacy and local flexibility as a grid service.

- Ensure alignment with ERAA

The implications of these national objectives should be also integrated in ERAA methodology.

## Article 19e - Flexibility support schemes and Article 19f - Design principles for flexibility support schemes

smartEn welcomes the reinforcement of the existing EU electricity market design principle that capacity mechanisms should be non-discriminatory, technology neutral and open to demand-side assets. We particularly appreciate the expansion of support schemes dedicated specifically to demand response and storage and the need to stimulate activation of deployed flexible capacity via a minimum level of participation in the market in terms of activated energy, and relative penalisation to capacity providers that do not activate the committed flexibility.

However, the following improvement to the article is necessary:

- Clarify the need for technology neutrality in the design of capacity mechanisms

The current product design for most capacity mechanisms in the EU currently shows a design-bias towards traditional generation, which de-facto excludes the participation of demand-side flexibility. This might be in the requirements like minimum bid sizes, de-rating, communication requirements or availability requirements, which are in most cases not justifiable by the needs that the product is trying to cover[5]. For this reason smartEn requests that rather than including additional requirements in capacity mechanisms, the existing requirements be maintained as truly technology neutral, with regular assessments of possible implicit barriers to distributed assets in the product design.

- Different services provided to System Operators should be remunerated separately

Assets that can provide multiple services should be able to participate to the different underlying markets.

[5] For more information on the assessment of all existing capacity mechanisms across Europe, please consult smartEn Map 2021 https://smarten.eu/wp-content/uploads/2022/01/the_smarten_map_2021_DIGITAL_final.pdf

## REVISION OF THE ELECTRICITY DIRECTIVE

### Article 11 - Entitlement to a fixed term, fixed price and dynamic electricity price contract

smartEn regrets that the Commission took a step backwards compared to the 2019 EU Electricity Market Design principle to also stimulate price-driven flexibility through dynamic price contracts. At the moment these commercial offers are still very limited[6].

It is important to improve the article by stressing that the development of fixed-term, fixed-price contracts should not undermine the possibility of consumers to become active and contribute to the achievement of the national system flexibility needs.

However, we welcome that some type of Time of Use Tariffs are considered in the definition of "fixed term, fixed price electricity supply contract" which would allow a minimal, simple flexible engagement of consumers.

Moreover, the right to dynamic contracts for particular devices or circuits with a dedicated metering device should be explicitly included. Indeed, where dedicated metering devices are installed, dynamic contracts should be allowed for these even in the absence of a smart (main) meter.

### Article 15a - Right to energy sharing

smartEn endorses the inclusion of energy sharing in the revision of the Electricity Directive as a way to stimulate a move towards a decentralised energy system that empowers consumers and prosumers while mitigating local congestions. Market-based local solutions, including coordination between stakeholders at various voltage level, should be favoured to value flexibilities.

However, the following improvements to the article are necessary to improve the effectiveness of energy sharing schemes:

- Include all types of consumers and do not impose capacity limits

The current proposal is excluding large commercial and industrial consumers from the possibility of energy sharing. This activity can take on numerous forms, such as large industrial consumers selling renewable energy generation to a nearby energy community, or the other way around. Also, the limit of sharing capacity of up to 10.8 kW for households and 50 kW for multi-family buildings is not justified, limiting the benefits of local energy sharing and discouraging a higher level of investment in renewable resources. Consumers and prosumers of all types and sizes should be allowed to contribute to energy sharing schemes.

- Clarify the goal of energy sharing

The concept of energy sharing should be applicable to all demand management, storage and renewable generation installed behind the boundary meter that allow for a self-balanced optimisation at local level. Market participants should provide support to self-balance districts, as outlined in smartEn Position paper[7].

- Stimulate flexible demand in energy sharing schemes

In light with the previous recommendation, the current proposal does not cover and stimulate flexible consumption of renewable electricity shared at local level. Energy sharing should maximise the flexible

[6] https://smarten.eu/report-the-implementation-of-the-electricity-market-design-2022-smarten-monitoring-report/
[7] https://smarten.eu/wp-content/uploads/2022/12/FINAL-smartEn_EMD_PositionPaper-1.pdf (page 10 on District Self-Balancing)

use of loads, storage and distributed generation. A more efficient use of distributed flexibility will reduce the need for investment in local generation capacity and will mitigate congestions caused by non-flexible end-users.

- Allow value stacking

Decentralised energy resources involved in energy sharing schemes should not be limited to this local use. They should be allowed to offer different services and participate to any market to stack value, individually and/or aggregated through the support of market parties.

- Ensure cost-reflective network tariffs and taxes are applicable

Consumers and prosumers engaging in energy sharing schemes should be bound by the same network use rules than other consumers, and hence should not be exempt from paying cost-reflective tariffs for their use of the local network based on the actual voltage level of consumers.

- Strengthen the bottom-up approach on data sharing responsibilities

Collection and sharing of data from energy sharing arrangements should be performed by the market party managing the scheme and provided to system operators in a clear and transparent manner, securing data owners' privacy and other considerations. Alternatively, DSOs could also collect this data, in cooperation with market parties. While system operators will need certain data for measurements and validation, they should justify any request for additional data.

## ANNEX
## Suggested Amendments on selected provisions[8]

**Recitals:**

(17) In order to be able to fully participate in the market and value their flexibility, consumers are progressively equipped with smart metering services. However, in those instances where these systems are not yet installed or do not provide for the sufficient level of accuracy or data granularity, system operators should be able to use data from dedicated metering devices for the observability and settlement of flexibility services such as demand response and energy storage. This should facilitate the active participation of the consumers in the market and the development of their demand response. The use of data from these devices should be accompanied by quality requirements relating to the data.

**Article 2 – Definitions**

'(72) 'peak hour' means an hour with ~~the highest~~ high electricity consumption combined with a low level of electricity generated from renewable or other inframarginal energy sources, or where the transmission or distribution grid may not be able to accommodate the forecasted generation or consumption, taking cross-zonal exchanges into account;

(79) 'dedicated metering device' means a device ~~attached to~~ relating to or embedded in an asset that sells demand response or flexibility services on the electricity market or to transmission and distribution system operators;

**Article 7a - Peak shaving product**

1. Without prejudice to Article 40(5) and 40(6) of the Electricity Directive, transmission and distribution system operators may procure peak shaving products in order to achieve a reduction of electricity demand during peak hours.

2. Transmission and distribution system operators ~~seeking to procure a peak shaving product~~ shall submit a proposal setting out the dimensioning and conditions for the procurement of the peak shaving product to the regulatory authority of the Member State concerned. The proposal of the transmission and distribution system operator shall comply with the following requirements:

(a) the dimensioning of the peak shaving product shall be based on an analysis of the need for an additional service to ensure security of supply. The analysis shall take into account a reliability standard or objective and transparent grid stability criteria approved by the regulatory authority. The dimensioning shall take into account the forecast of demand, the forecast of electricity generated from renewable energy sources and the forecast of other sources of flexibility in the system. The dimensioning of the peak shaving product shall be limited to ensure that the expected benefits of the product do not exceed the forecasted costs;
(b) the procurement of a peak shaving product shall be based on objective, transparent, non discriminatory, market-based criteria and be limited to demand response~~;~~. It shall not exclude participating assets to access other TSOs, DSOs and wholesale markets and ensure TSO-DSO coordination;
(c) the procurement of the peak shaving product shall take place using a competitive bidding process, with selection based on the lowest cost of meeting pre-defined technical and environmental criteria. The minimum bid size should be of 100kW or less, to allow for the effective participation of small consumers, directly or through aggregation;
(d) contracts for a peak shaving product shall not be concluded more than two days before its activation and the contracting period shall be no longer than one day;
(e) the activation of the peak shaving product shall not reduce cross-zonal capacity;
(f) the activation of the peak shaving product shall take place after the closure of the day ahead market and before the start of the balancing market;
(g) the peak shaving product shall not imply starting generation located behind the metering point.

[8] Additions to the text proposed by the Commission are highlighted in light blue and deletions are crossed out.

3. The actual reduction of consumption resulting from the activation of a peak shaving product shall be measured against a baseline, reflecting the expected electricity consumption without the activation of the peak shaving product. ~~Transmission system operators shall develop a baseline methodology in consultation with market participants~~ Market participants should be responsible for defining the baseline based on data from the boundary smart meter or any other dedicated metering device that the energy supplier or independent aggregator can provide. Market participants shall ~~and~~ submit ~~it~~ their proposal for a baseline methodology to the regulatory authority.

4. Regulatory authorities shall approve the proposal of market participants ~~the transmission system operators seeking to procure a peak shaving product and~~ for the baseline methodology submitted in accordance with paragraphs 2 and 3 or shall request the market participants ~~transmission system operators~~ to amend the proposal where it does not meet the requirements set out in these paragraphs. Ex-post verification measurements shall be independently verified by a third party identified by the regulatory authority to attest reliability and attest the activation during the relevant peak periods.

**Article 7b - Dedicated metering device**

1. Member States shall allow customers and market participants, including independent aggregators, ~~transmission system operators and distribution system operators~~ to use data from dedicated metering devices:
    a. for the ~~observability and~~ settlement and billing of demand response and flexibility services, including from storage systems. This process shall be independently audited by a third party identified by the regulatory authority following the common European framework for certification.
    b. for allowing the consumer to have multiple suppliers behind the main meter.

2. An Implementing Act ~~Member States~~ shall establish proportional and fit-for-purpose EU harmonised requirements for a dedicated metering device data validation process to check and ensure the quality of the respective data. It should be aligned with the framework on metering device data in the Network Code for Demand Response.

**Article 8 - Trade on day-ahead and intraday markets**

(5) Article 8 is amended as follows:
(a) paragraph 1 is replaced by the following:
'NEMOs shall allow market participants to trade energy as close to real time as possible and at least up to the intraday cross-zonal gate closure time. By 1 January 2028, the intraday cross-zonal gate closure time shall be at the earliest 30 minutes ahead of real time.'
(b) paragraph 3 is replaced by the following:
'NEMOs shall provide products for trading in day-ahead and intraday markets which are sufficiently small in size, with minimum bid sizes of 100kW or less, to allow for the effective participation of demand-side response, energy storage and small-scale renewables including direct participation by customers or through aggregation.'

**Article 18 – Charges for access to networks, use of networks and reinforcement**

(7) Article 18 is amended as follows:
[a] paragraph 2 is replaced by the following:
"2. Tariff methodologies shall reflect the fixed costs of transmission system operators and distribution system operators and shall consider both capital and operational expenditure to provide appropriate incentives to transmission system operators and distribution system operators over both the short and long run, including anticipatory investments, in order to increase efficiencies, including energy efficiency, to foster market integration and security of supply, to support the use of flexibility services, efficient investments including solutions to optimise the existing grid and facilitate demand response and related research activities, and to facilitate innovation in the interest of consumers in areas such as digitalisation, flexibility services and interconnection";
[b] paragraph 8 is replaced by the following:

"8. Transmission and distribution tariff methodologies shall provide incentives to transmission and distribution system operators for the most cost-efficient operation and development of their networks including through the procurement of services. For that purpose, regulatory authorities shall recognise relevant costs as eligible, shall include those costs in transmission and distribution tariffs, and shall introduce performance targets in order to provide incentives to transmission and distribution system operators to increase efficiencies in their networks, including through energy efficiency, the use of flexibility services and the development of smart grids and intelligent metering systems."
[c] in paragraph 9, point (f) is replaced by the following:
'(f) methods to ensure transparency in the setting and structure of tariffs, including anticipatory investments;'
[d] in paragraph 9, the following point (i) is added:
'(i) incentives for efficient investments in networks, including on flexibility resources and flexible connection agreements.'

**Article 19c - Assessment of flexibility needs**

1. By 1 January 2025 and every two years thereafter, the regulatory authority of each Member State shall assess and draw up a report on the need for flexibility in the electricity system for a period of at least 5 years, in view of the need to cost effectively achieve security of supply and decarbonise the power system, taking into account the integration of different sectors. The report shall be based on the data and analyses provided by the transmission and distribution system operators, with the direct involvement of relevant stakeholders, including energy suppliers and aggregators, of that Member State pursuant to paragraph 2 and using the methodology pursuant to paragraph 3.
2. The report shall include an evaluation of the need for flexibility to integrate electricity generated from renewable sources in the electricity system and consider, in particular, the potential of non-fossil flexibility such as demand side response, V2X and storage to fulfil this need, both at transmission and distribution levels. The report shall distinguish between seasonal, daily and hourly flexibility needs, and between zonal and local flexibility needs. It shall also include a business-as-usual scenario reflecting the regulatory and financial support framework.
3. The transmission and distribution system operators of each Member State shall provide the data and analyses needed for the preparation of the report referred to in paragraph 1 to the regulatory authority. The data reported shall follow a common EU format established in a framework approved by ACER.
4. The ENTSO for Electricity and the EU DSO entity shall coordinate transmission and distribution system operators as regards the data and analyses to be provided in accordance with paragraph 2. In particular, they shall:
    a. define the type of data and format that transmission and distribution system operators shall provide to the regulatory authorities;
    b. develop a methodology for the analysis by transmission and distribution system operators of the flexibility needs, taking into account at least all existing sources of flexibility and planned investments at interconnection, transmission and distribution level as well as the need to decarbonise the electricity system.
    c. ensure data and analyses from the assessment of flexibility needs is aligned with other resource adequacy assessments.
5. By 1 March 2024, the ENTSO for Electricity and the EU DSO entity shall jointly submit to ACER a proposal regarding the type of data and format to be submitted to regulatory authorities and the methodology referred to in paragraph 3. Within ~~three~~ six months of receipt of the proposal, ACER shall consult with market participants and either approve the proposal or amend it. In the latter case, ACER shall consult the ENTSO for Electricity and the EU DSO entity before adopting the amendments. The adopted proposal shall be published on ACER's website.
6. The regulatory authorities shall submit the reports referred to in paragraph 1 to ACER and publish them. Within 12 months of receipt of the reports, ACER shall issue a report analysing them and providing recommendations on issues of cross-border relevance regarding the findings of the regulatory authorities.
7. The national assessment of flexibility needs should be integrated in the methodology for the European resource adequacy assessments in accordance with Article 23 (3) of Regulation (EU) 2019/943. Compatibility of methodology with the TYNDP and the DSOs network development plans shall be ensured.

**Article 19d - Indicative national objective for demand side response and storage**

Based on the report of the regulatory authority pursuant to Article 19c(1), each Member State shall define a~~n indicative~~ quantifiable national objective for demand side response and storage, including vehicle-to-grid technologies.
It shall include a quantification of:

- both actual and forecasted available capacity (GW);
- both actual and forecasted activation of that available capacity (GWh) to contribute to system flexibility needs as foreseen by Article 19c.

This ~~indicative~~ national objective shall also be reflected in Member States' integrated national energy and climate plans as regards the dimension 'Internal Energy Market' in accordance with Articles 3, 4 and 7 of Regulation EN 39 EN (EU) 2018/1999, in their integrated biennial progress reports in accordance with Article 17 of Regulation (EU) 2018/1999, as well as in the European resource adequacy assessments in accordance with Article 23 (3) of Regulation (EU) 2019/943, and compatibility of methodology with the TYNDP and the DSOs network development plans shall be ensured.

**Article 19e - Flexibility support schemes**

1. Member States which apply a capacity mechanism in accordance with Article 21 shall consider the promotion of the participation of non-fossil flexibility such as demand side response and storage by ensuring that the product design, including all participation requirements, are technology neutral, market-based, and do not pose any undue barriers on demand side response and storage, including from electric vehicles. ~~by introducing additional criteria or features in the design of the capacity mechanism.~~
2. Where the measures introduced in accordance with paragraph 1 to promote the participation of non-fossil flexibility such as demand response and storage in capacity mechanisms are insufficient to achieve the flexibility needs identified in accordance with 19d, Member States may apply flexibility support schemes consisting of payments for the available capacity of non-fossil flexibility such as demand side response and storage, including vehicle-to-grid technologies.
3. Member States which do not apply a capacity mechanism may apply flexibility support schemes consisting of payments for the available capacity of non-fossil flexibility such as demand side response and storage.

**Article 19f - Design principles for flexibility support schemes**

Flexibility support scheme for non-fossil flexibility such as demand response and storage applied by Member States in accordance with Article 19e(2) and (3) shall:
(a) not go beyond what is necessary to address the identified flexibility needs in a cost effective manner;
(b) be limited to new investments in non-fossil flexibility such as demand side response and storage, including vehicle-to-grid technologies;
(c) must not imply starting fossil fuel-based generation located behind the metering point;
(d) select capacity providers by means of an open, transparent, competitive, non-discriminatory and cost-effective process;
(e) prevent undue distortions to the efficient functioning of the electricity markets including preserving efficient operation incentives and price signals and the exposure to price variation and market risk;
(f) provide incentives for the integration in the electricity market in a market-based and market-responsive way, while avoiding unnecessary distortions of electricity markets as well as taking into account possible system integration costs and grid stability;
(g) set out a minimum level of participation in the market in terms of activated energy, which takes into account the technical specificities of storage and demand response;
(h) apply appropriate penalties to capacity providers which do not respect the minimum level of participation in the market referred to in point (g), or which do not follow efficient operation incentives and prices signals;
(i) be open to cross-border participation.';

## REVISION OF THE ELECTRICITY DIRECTIVE

**Article 11 - Entitlement to a fixed term, fixed price and dynamic electricity price contract**

1. Member States shall ensure that the national regulatory framework enables suppliers to offer fixed-term, fixed-price contracts and dynamic electricity price contracts. Member States shall ensure that final customers who have a smart meter or a dedicated metering device installed can request to conclude a dynamic electricity price contract and that all final customers can request to conclude a fixed-term, fixed-price electricity price contract of a duration of at least one year, with at least one supplier and with every supplier that has more than 200 000 final customers.
2. The development of fixed-term, fixed-price contracts should not exclude or otherwise undermine the possibility of consumers participating in demand response and energy sharing and actively contributing to the achievement of the national system flexibility needs.

**Article 15a - Right to energy sharing**

1. All households, small and medium sized enterprises, industrial and commercial consumers and public bodies have the right to participate in energy sharing as active customers.
   (a) Active customers shall be entitled to share renewable energy between themselves based on private agreements or through a legal entity.
   (b) Active customers may use a third party that owns or manages for installation, operation, including metering and maintenance a storage, demand management assets or renewable energy generation facility for the purpose of facilitating energy sharing, without that third party being considered an active customer. The third party should aim at self-balancing the behind-the-meter flexible loads, distributed renewable generation and storage assets part of an energy sharing scheme.
   (c) Member States shall ensure that active customers participating in energy sharing:
   (d) are entitled to have the shared electricity netted with their total metered consumption within a time interval no longer than the imbalance settlement period and without prejudice to applicable taxes, levies and cost-reflective network charges based on the actual voltage level of consumers;
   (e) benefit from all consumer rights and obligations as final customers under this Directive~~, except in case of energy sharing between households with an installed capacity up to 10.8 kW and up to 50 kW for multi-apartment blocks using peer-to-peer trading agreements~~;
   (f) have access to template contracts with fair and transparent terms and conditions for peer-to-peer trading agreements between households, and for agreements on leasing, renting or investing in storage, demand management assets and renewable energy generation facilities for the purpose of energy sharing; in case of conflicts arising over such agreements, final customers shall have access to out of court dispute settlement in accordance with Article 26;
   (g) are not subject to unfair and discriminatory treatment by market participants or their balance responsible parties;
   (h) are informed of the possibility for changes in bidding zones in accordance with Article 14 of Regulation (EU) 2019/943 and of the fact that the right to share energy is restricted to within one and the same bidding zone,
   (i) are allowed to offer different services and participate to any market, individually or aggregated through the support of market parties, with the decentralised energy resources involved in energy sharing.
   (j) Member States shall ensure that relevant transmission or distribution system operators or other designated bodies:
   (k) monitor, collect~~, validate and communicate metering~~ data related to the shared electricity based on information provided by the third party setting up and managing energy sharing ~~with relevant final customers and market participants at least every month, and in accordance with Article 23~~;
   (l) provide a relevant contact point to register energy sharing arrangements, receive information on relevant metering data~~points~~, changes in location and participation as provided by the third

party setting up and managing energy sharing, ~~and, where applicable, validate calculation methods~~ in a clear, transparent and timely manner.

2. Member States shall take appropriate and non-discriminatory measures to ensure that energy poor and vulnerable households can access energy sharing schemes. Those measures may include financial support measures or production allocation quota.

## About smartEn - Smart Energy Europe

smartEn is the European business association integrating the consumer-driven solutions of the clean energy transition. We create opportunities for every company, building and car to support an increasingly renewable energy system. Our membership consists of the following companies:


The positions expressed in this document represent the views of smartEn as an association, but not necessarily the opinion of each specific smartEn member.
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