

Bld. Brand Whitlock 114 / B-1200 Brussels

**Alvaro Vilas**

alvaro.vilas@applia-europe.eu



## **APPLiA's position paper on Electricity Market Design (EMD)**

APPLiA welcomes the proposal that aims to optimise the European energy market and protect and empower consumers; as a response to volatile short-term energy prices, the excessive influence of fossil fuel prices on electricity prices and the failure for low cost renewables and low carbon energy to be better reflected in electricity bills;

The participation in demand side flexibility services by household consumers plays a key role in fulfilling the objective of the proposal. Home appliances manufacturers already provide energy smart appliances that incorporate flexibility options, but not all home appliance products can provide flexibility and easily swift their use time.

From the specific home appliances perspective, we understand our main role is the provision of Energy smart appliances to consumers. What do we mean by Energy Smart Appliances?

→ "Energy Smart Appliance: a communications-enabled device able to respond to external stimuli such as price and/or other signals, either directly or via an intermediary, either in a stand-alone configuration or as a part of an aggregate, and able to provide flexibility regarding its electricity consumption in time or consumption patterns."

APPLiA would like to provide some comments on the following aspects of the EMD:

- A. Peak shaving product.
- B. Dedicated metering device.
- C. Empower consumers to adopt demand side response - Right to energy sharing.
- D. Flexibility assessment & indicative national objectives

### **1. Peak shaving product (article 7a)**

#### *1.1. Not all home appliances products can easily swift their use and/or provide demand response*

We welcome the Commission proposal aimed at introducing in the EU legislation a Peak Shaving Product (PSP) since it allows to increase the resilience of the electricity system by procuring an additional flexibility service via a competitive bidding process based on objective, transparent and non-discriminatory criteria.

However, we would like to highlight the following points:



- Not all home appliances can – or will – be able to participate in the provision of demand side flexibility services. It is up to manufacturers to bring such appliances to the market, if relevant, and to customers to buy them, if they are willing to engage in the electricity markets. Hence, there should be no obligation placed on either manufacturers and/or consumers to this regard;
- It shall be investigated whether the PSP can also be procured at a decentralised level by DSOs;
- It shall be clearly mentioned that the resources procured under the PSP shall be financially compensated. At present, this can be construed as resulting from what foreseen under paragraph 2, point c); but we would encourage co-legislators to spell it out more clearly;
- It shall be mandated that in designing the PSP the TSO shall first consult market parties and general stakeholders on a most open and transparent manner;
- It shall be clarified that while PSP contracts can only be concluded close to deliver date and be last for maximum one day – as foreseen in paragraph 2, point d) – service providers need long-term visibility – at least one-year ahead – on the need of the system to have such flexibility in place.

### 1.2. *Including DSOs for peak electricity reduction*

The Commission proposal understands the peak electricity reduction depends only on TSOs action. We regret this choice and believe both TSOs and DSOs should be entitled to contribute in facilitating reduced peak demand flexibility. DSOs must meet the needs of all electricity customers, providing access to the electricity system, and delivering and managing the performance of a system. Inasmuch the flexibility patterns should be orchestrated by considering both DSO and TSO systems. It is already happening in Ireland with their Beat the Peak program

## 2. **Dedicated metering devices (article 7b)**

### 2.2. *Definition of dedicated metering devices only to tackle those products that sell flexibility services and demand response*

We welcome the definition of dedicated metering devices (article 2, point 79) and 7b), as it ensures that **only** those home appliances products that actually *'sells demand response or flexibility services on the electricity market or to transmission and distribution system operators'* are part of the scope. This definition goes in the right direction as it links the condition that the product already offers demand response and flexibility services in the market, instead of mandating manufacturers to re-design the metering devices embedded in their products .

APPLiA supports the following explanation in recital 46 on demand response as the products that ***'have the capability to shift their electricity consumption automatically in response to price signals'***. However, we consider it necessary that this clarification is also well reflected in the respective definitions of the legal text. Not all home appliances with metering devices embedded sell, or even provide, demand response and flexibility services. The proposal understands well not to include products that, even if they are technically capable of providing demand response, do not offer demand response.



Broad access rights by TSOs and DSOs to access to data from dedicated metering devices should be addressed via the aggregated and anonymised data from the smart metering systems (which contain the data necessary for peak shaving) in order to prevent disclosure of sensitive data contained in the product in which the dedicated metering devices are embedded, and ensure compliance with the personal data protection framework established by the GDPR. The purposes listed in Recital 17 and Article 7b for TSOs to use data from dedicated metering devices are currently too broad and should exclude usage of data for "observability". This would go beyond the responsibility of TSOs and beyond the goal of peak shaving.

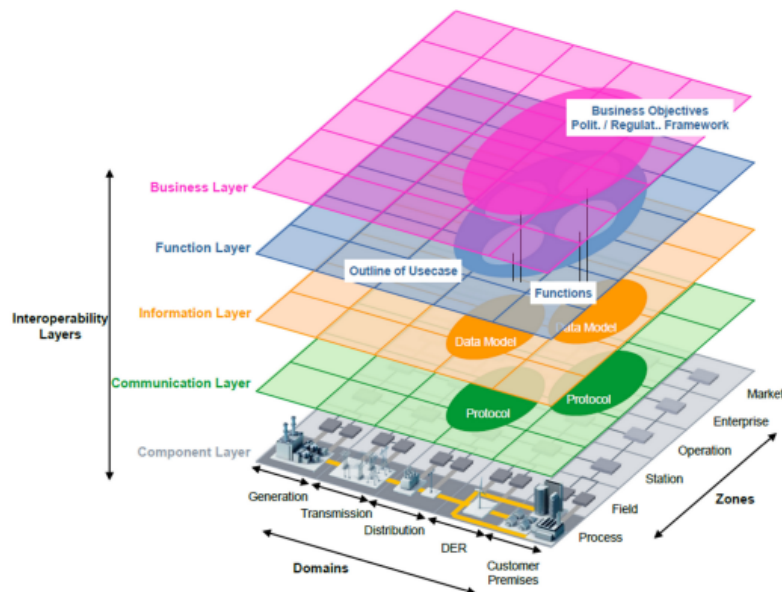
Besides, we would like to clarify that only some home appliances products can provide demand response and flexibility services (like e.g., HVAC and washing machines). In addition to the flexibility potential, performance of such appliances, and user comfort should be considered as well. In any case Energy Smart Appliances must not operate in a manner that can lead to unsafe situations, and as a result the appliance must be configured in a way such that safety aspects always have priority over any other operation (like for example peak shaving). Furthermore, certain home products do not show (like kitchen appliances) the same level of demand response penetration. In a nutshell, **the scope of EMD dedicated metering devices should be determined by the product high flexibility potential and low comfort impact**, in alignment with the final report of the Ecodesign Preparatory study on Smart Appliances (Lot 33):

- High flexibility potential with few comfort and/or performance impacts: dishwashers, washing machines, washer dryers, buffered water heaters, radiators, boilers, heat pumps, circulators, residential and non-residential air conditioners and battery storage systems;
- Smaller flexibility potential and/or larger comfort/health impacts: tumble dryers, refrigerators, freezers, extraction fans, heat recovery ventilation and air handlings units and chargers (low power);
- Only emergency flexibility potential: electrical hobs, ovens, hoods, vacuum cleaners and lighting.



### 2.3. Key role of European Standardisation bodies

Smart Energy Appliances should be interoperable and able to communicate with/to other relevant elements such as energy managers, home and building automation systems, storage systems, aggregators, DSOs, etc. Involved subsystems (and their corresponding layers) should be syntactically and semantically interoperable, so that energy data is exchanged correctly, information and commands understood and interpreted correctly. The interchangeability of the subsystems requires the use of a technology neutral and standardised language, which is implemented by the relevant communication protocols.<sup>1</sup>



\*Reference: EN 50631 standard

In order to **develop the needed technical specifications for data exchange, the European standardisation organisations (ESOs) need to be involved in developing technology neutral European standards** to guarantee that coherence, transparency, openness, consensus, voluntary application, and independence from special interests and efficiency are guaranteed.

Leaving up to Member States national legislation to set specific requirements for a dedicated metering device data validation process will trigger 27 different data validation processes, whereas obliging the EU Commission to come up with an EU harmonised framework is not feasible. Thus, European standardisation bodies' combination of EU approach in conjunction with National market specificities, will prevent the Single Market fragmentation on data validation process and guarantee expertise from stakeholders and European/National regulatory authorities to be taken into account.

<sup>1</sup> European Commission (2022): "Energy Smart Appliances' Interoperability: Analysis on Data Exchange from State-of-the-art Use Cases". Available [here](#).



### **3. Empower consumers to adopt demand side response - Right to energy sharing (article 15)**

#### *3.1. Financial rewards to activate consumers demand response*

Products enabling demand side response (like Energy Smart Appliances), will come at a higher cost than products not having this option. As a result, consumers need to be incentivized to adopt products with demand side response.

We therefore welcome that the current proposal wants to empower and protect consumers, by enabling economic benefits for adopting demand side response. Unfortunately, providing mere information on non-fossil flexibility solutions and facilitating aggregation of distributed demand and supply will not guarantee consumers to adopt demand side response. Empowering consumers with 'greater contract choice and more direct access to renewable and low carbon energy' is a step in the right direction, but it is key that this is accompanied by financial incentives for consumers (like for example, reduction in the electricity bill to adopt demand side response).

### **4. Flexibility assessment & indicative national objectives (articles 19c and 19d).**

#### *4.1. Home appliance manufacturers need visibility on the developments with flexibility services to be able to play their part*

APPLiA welcomes the introduction of a report aimed at assessing the need for flexibility in the electricity system with a view to highlight the role that flexibility resources such as demand response and storage can provide to the power systems in all timeframes (seasonal, daily, hourly).

Getting this assessment right is of paramount importance for the home appliance sector since it will then be used by Member states to draw their indicative national objectives for demand response and storage to be featured in the integrated national energy and climate plans. In turn, this will offer a clear sign to manufacturers as to the pathway that each Member state plans to follow in developing such flexibility services, hence providing an outlook for their product development activities.

Whilst the date chosen – 1 January 2025 for the release of the first assessments – seems challenging, considering that the Regulation will most likely only entry into force by the end of 2023, we urge all stakeholders, and in particular ACER, the ENTSO for Electricity and the EU DSO entity to take all necessary steps to ensure a timely delivery of the underlying methodology. We regret that the proposed Article 19c does not foresee a consultative role for the wider set of stakeholders active in the field, including home appliance manufacturers, aggregators, energy traders and suppliers, etc. and ask the co-legislators to introduce such provisions.



## Annex - **Amendments**

### **Electricity Regulation**

#### 'Article 7a

##### *Peak shaving product*

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

2. *Transmission 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 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, **the flexibility potential of the product<sup>2</sup>**, 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 cost **and have the minimum impact on consumers comfort**;*

*(b) the procurement of a peak shaving product shall be based on objective, transparent, non-discriminatory criteria and be limited to demand response;*

*(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;*

*(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.*

---

<sup>2</sup>Based on the [European Commission, 'Ecodesign Preparatory Study on Smart Appliances', 2017](#) :

The flexibility potential of a group of appliances is defined by two parameters:

1. A shifting potential = amount of energy that can be shifted, expressed in [MWh/h]
2. Average maximal shifting period = average maximum number of hours [h] that appliance can be shifted (i.e., to consume later/earlier in time than initially planned)



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 and submit it to the regulatory authority.

4. Regulatory authorities shall approve the proposal of the transmission system operators seeking to procure a peak shaving product and the baseline methodology submitted in accordance with paragraphs 2 and 3 or shall request the transmission system operators to amend the proposal where it does not meet the requirements set out in these paragraphs.

#### Article 7b

##### *Dedicated metering device*

1. "Member States shall allow transmission system operators, **aggregators**, and distribution system operators to **strictly** use data from dedicated metering devices **that is necessary** for the ~~observability~~ and settlement of demand response and flexibility services, including from storage systems.

2. **European standardisation bodies shall develop the standards, as defined in Regulation (EU) No 1025/2012,** ~~Member States shall establish requirements~~ for a dedicated metering device data validation process to check and ensure the quality of the respective data.;

##### Justification

To be fully aligned with [Regulation \(EU\) No 1025/2012](#),

-----

#### 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 an ~~indicative~~ national objective for demand side response and storage.

**It shall take into account the following: 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 19c.**
- **Possible financial measures to incentive consumers to adopt demand side response.**

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.

#### **Electricity Directive**

"Article 15a"



### *Right to energy sharing*

*1. All households, small and medium sized enterprises 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 of a storage or renewable energy generation facility for the purpose of facilitating energy sharing, without that third party being considered an active customer.*

*(c) Member States shall ensure that active customers participating in energy sharing. **Policy measures to financially reward active consumers shall be considered.***

*(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 network charges;*

*(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 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) Member States shall ensure that relevant transmission or distribution system operators or other designated bodies:*

*(j) monitor, collect, validate and communicate metering data related to the shared electricity with relevant final customers and market participants at least every month, and in accordance with Article 23;*

*(k) provide a relevant contact point to register energy sharing arrangements, receive information on relevant metering points, changes in location and participation, 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.*



# APPLiA's position paper on Electricity Market Design (EMD)



APPLiA - Home Appliance Europe represents home appliance manufacturers from across Europe. By promoting innovative, sustainable policies and solutions for EU homes, APPLiA has helped build the sector into an economic powerhouse, with an annual turnover of EUR 50 billion, investing over EUR 1.4 billion in R&D activities and creating nearly 1 million jobs.

