– Consultation response –

Europex response to the Commission consultation on the priority list for the development of network codes and guidelines on electricity for the period 2020-2023 and on gas for 2020 (and beyond)

Brussels, 14 May 2020 | Europex, the Association of European Energy Exchanges, welcomes the opportunity to take part in the present consultation. Our response addresses the proposed priorities for new electricity network rules on cybersecurity and demand-side flexibility.

Concerning priorities for electricity, the European Commission asks for stakeholder input on:

1. The need and adequate scope of new electricity network codes on cybersecurity;
2. The need and adequate scope of new electricity network codes on demand side flexibility;
3. The need and possible scope of new electricity network codes and guidelines that could be envisaged beyond 2023.

1. The need and adequate scope of a new electricity network code on cybersecurity

While we see good progress in the work on common cybersecurity standards in the gas sector due to organisations like the European Association for the Streamlining of Energy Exchange – gas (EASEE-gas), cybersecurity coordination in the electricity sector is currently still lacking. We would therefore encourage the establishment of similar coordination processes for power markets. The focus of such coordination should be to harmonise and streamline European TSO processes as well as relevant market communication standards.

There is a particular need for closer coordination on nomination standards. Nominations are a core process in the energy value chain and ensure that the right amount of energy is transferred from one market participant to another. In the European gas markets, EDIg@s

was defined as a common standard message format for gas nominations. In addition, the AS2/AS4 standard is used as the transfer protocol for gas nominations to ensure a safe and efficient transmission of the relevant information.

In contrast, in power markets several competing approaches to transmission and message standards exist. This results in potential variation in cybersecurity levels and increases market entry barriers for potential new market participants as they have to build up detailed knowledge of local standards, with varying degrees of national regulatory requirements between different markets.

The use of common, very safe protocol standards could significantly improve cybersecurity. Examples of this are the AS2/4 safe protocols (in contrast for instance to the use of e-mail).

2. The need and adequate scope of a new electricity network code on demand side flexibility

2.1 Do we need a network code on demand side flexibility?

A dedicated network code on demand side flexibility should only be established if it is deemed necessary and serves the effective implementation of the Clean Energy for All Europeans package. Whatever the outcome of such an assessment may be, the full and timely implementation of existing regulation must remain the first priority.

We outline in our response below several areas where we see a need to streamline the existing rules or develop new common approaches to implementation to ensure that demand-side flexibility can fully participate in the European electricity market, whilst maintaining compatibility with organised short-term wholesale markets. Further assessment is needed to determine whether this is best accomplished by a network code or by other means.

The European Union is committed to ambitious decarbonisation targets and about to define a pathway to full climate neutrality by 2050. As outlined in the consultation document, decarbonisation and decentralisation increase the need for more system flexibility. This is especially true for demand-side flexibility, which is urgently needed to ensure a cost-efficient energy transition. Demand-side flexibility is a key ‘enabler’ to integrate decentralised energy production assets, as well as the increasing number of flexible assets on the demand side, including electric vehicles and heat pumps. While grid extension is still needed, demand-side flexibility is necessary to support the process of decarbonisation and to quickly deliver efficient solutions. This has already been acknowledged in the Clean Energy Package, that sets out key principles for a harmonised Internal Electricity Market.

In view of this, Europex welcomes that the implementation of existing regulation remains a priority for the European Commission, as the Clean Energy Package already contains valuable targets for demand-side flexibility. In addition to measures designed to ensure that consumers can actively participate in markets (access to dynamic pricing, smart metering etc.), these include, inter alia, market-based procurement of non-frequency ancillary services (Article 31 Electricity Directive (EU) 2019/944), market-based redispatch that is open to all generation technologies, storage and demand response (Art 13 Electricity Regulation (EU) 2019/943), DSO incentives for the use of flexibility in distribution networks and the participation of demand response in markets through aggregation, including through independent aggregators (Article 17 Electricity Directive (EU) 2019/944).

The study published by the European Commission *"Assessment and roadmap for the digital transformation of the energy sector towards an innovative internal energy market" (2020)*[1] includes a roadmap towards an innovative internal energy market until 2030, that summarises the existing regulations to be implemented with regard to TSO-DSO coordination, specifications of the products for flexibility services, the more active role of DSOs in the procurement of flexibility services and the role of aggregators in procuring flexibility services.

Key steps in our view include full implementation of the Electricity Regulation (EU) 2019/943 especially with regards to:

- the obligation for TSOs and DSOs to adopt market-based mechanisms for redispatching;
- the implementation of incentive- and output-based regulatory frameworks for electricity distribution networks;
- the monitoring of implementation of the network codes and guidelines; the network planning and operation.

Stakeholder engagement processes (consultation, expert panels, etc.) are also needed at EU level to develop guidelines to promote the provision of flexibility services at the distribution level by means of coordination between TSOs, DSOs and flexibility platforms.

However, different Member State interpretations of the Clean Energy Package rules when designing national regulatory frameworks, or failure to implement the rules in a timely manner, may result in sub-optimal solutions being chosen or business cases that are not viable due to variation in national rules. Moreover, the current state of clearly different national approaches might continue even after CEP provisions are transposed into Member States' national legislation.

[1] https://ec.europa.eu/energy/studies/assessment-and-roadmap-digital-transformation-energy-sector-towards-innovative-internal_en

In view of this, further streamlining and clarification of the rules can therefore help to achieve the following objectives:

a) ensure that CEP rules are clearly implemented, ensuring a market-based approach;
b) limit differences between national implementations, thereby allowing cross-border compatibility of solutions (e.g. common approaches regarding the inclusion of independent aggregators into the market, baselining and metering, information exchange);
c) effectively scale up demand-side flexibility services and markets, including local flexibility markets and allowing upstream integration into day-ahead and intraday organised markets.

The demand-side flexibility market, including local flexibility marketplaces, is still fragmented and in a nascent stage of development, with various levels of activities in different Member States and different solutions and business models emerging. When developing EU-wide rules to scale up demand-side flexibility and remove barriers, the value of harmonised rules must be balanced with the need to allow room for innovative solutions to emerge that are tailored to local needs.

It is crucial that the different EU member states have the opportunity to learn from early experiences with demand-side flexibility, test solutions and gain and share knowledge before market solutions are defined in a harmonised European framework. While an open exchange about the different approaches and the classification in a common taxonomy is indeed necessary, regulation that is too narrowly defined through a network code might restrict levels of competition and innovation and might result in an inefficient solution.

Therefore, before any network code is introduced to regulate demand-side flexibility, the Commission should review of the status of the demand-side flexibility market in the EU, including local flexibility markets. Such a review should also take into account the results of a regulatory 'gap' analysis. This will help to determine whether the regulatory objectives can best be achieved through a network code at EU level, via another instrument including via changes to other network codes, or at national level.

2.2 What is the adequate scope of a network code for demand-side flexibility?

If a network code for demand-side flexibility is assessed as necessary to achieve the regulatory objectives, the following aspects and objectives should be addressed.

Incentivise market-based procurement of flexibility, as detailed in the Clean Energy Package

Regulated, cost-based mechanisms fail to include demand-side flexibility and put demand-side flexibility service providers at a clear disadvantage. Indeed, applying a traditional cost-based approach has the effect of excluding most demand-side flexibilities. This is because the

cost structures of demand-side flexibility are very different from those of conventional technologies. The definition of the cost of the load is based on the value of the electricity to the consumer. These opportunity costs vary between individual consumers as well as with time and location. Since it is not possible to define costs for these load-side flexibilities, they can only realise their full potential through a market with free bids and not through a regulated, cost-based mechanism. The Clean Energy Package prioritises a market-based approach to the procurement of flexibility, but provides for several exemptions to the rule. Cost-based approaches are not contributing to the decarbonisation challenge and should be a clear exemption to the target design of market-based flexibility options. A network code could help to provide further guidance on the usage and limitations of such exemptions.

Support the creation of transparent and non-discriminatory flexibility markets

Flexibility markets are an essential part of unlocking the potential of demand-side flexibility and will become key for the successful integration of renewables into the electricity system. We support that the European Commission includes the creation of transparent and non-discriminatory flexibility markets as one of the aims of a possible Network Code. Competitive and liquid short-term wholesale markets offer already today many ways to value flexibility, in particular with smaller product granularity and shortened lead times. However, new innovative markets and products are needed to further increase the trading of flexibility and to allow the market to solve local congestions in a cost-efficient way. Such markets will not only create the right conditions in the short term to use the embedded flexibility but will also provide incentives for the development of new flexibility sources.

In our paper on local flexibility markets (published 12 February 2020, also attached), we highlight a number of important principles which we believe need to be reinforced, including, inter alia:

- Flexibility marketplaces should ensure non-discriminatory access and should bring together flexibility providers with all those who need it (rather than only allowing TSOs and DSOs to procure flexibility);
- Flexibility marketplaces should be operated by independent, neutral third parties;
- Marketplaces and products should be open to all technologies, including intermittent RES, flexible thermal assets, power-to-gas, storage, as well as DSR by way of aggregation;
- Clear ownership (unbundling) rules for the operation of flexibility assets, including storage;
- System operator incentives to promote the procurement of flexibility as an alternative to grid investment when it the most cost-effective solution.

A network code providing a legal framework for demand-side flexibility, or guidance via another instrument, could help to ensure clarity on these aspects, where the Clean Energy Package is ambiguous or not sufficiently precise.

Ensure coherence with existing organised short-term wholesale markets

Progressive integration of short-term power markets has led to the implementation of EU-wide single day-ahead and intraday markets as envisaged in CACM, the Guideline on Capacity Allocation and Congestion Management. In addition, rules introduced by the Clean Energy Package provide a framework for the trading of products which adequately reflect the penetration of intermittent and decentralised generation and demand-side response. Against this backdrop, it is essential that demand-side flexibility markets are compatible with existing organised short-term wholesale markets. They must also be compatible with the national terms and conditions for imbalance settlement, including EU-harmonised imbalance settlement once this has been implemented. This will allow flexibility markets to build on the progress made by existing wholesale markets, benefit from possible links with them and avoid the need to redesign the existing European liberalised wholesale power market structure.

A potential network code for demand-side flexibility should not define standardised products for flexibility services

Flexibility markets are still developing rapidly. Different regulatory sandboxes are in place, such as the SINTEG projects in Germany or the European Horizon 2020 projects. A network code on demand-side flexibility that defines overly prescriptive rules or favours a particular market model could restrict the further development of innovative solutions. This holds especially true for product standardisations. Flexibility markets are a response to specific physical challenges in the grid. The best design and products always need to take into account local specifications. A one-size-fits-all approach might not be the appropriate solution.

Ensure full market access for independent aggregators as well as cross-border compatibility of solutions

Aggregators, including independent aggregators, play a vital role in facilitating demand-side flexibility and act as intermediaries between smaller producers, customers (commercial, industrial, residential) and the market. The Clean Energy Package rules aim to facilitate demand-response through aggregation. For example, independent aggregators don’t require prior consent from suppliers to engage with the final customer, final customers who have a contract with independent aggregators must not face undue payments and aggregators must be financially responsible for imbalances they cause. Products should be defined on all electricity markets, including ancillary services and capacity markets, so as to encourage the participation of demand response.

While setting out these basic principles, the Electricity Directive (EU) 2019/944 leaves it up to Member States to choose the appropriate implementation model for independent aggregation. We recognise that there is no 'one-size-fits-all' solution - however, more detailed rules may be required in a number of areas in order to more effectively scale aggregation services and ensure that different business models can be implemented across the EU. Given the harmonisation in wholesale and balancing markets, harmonisation of certain aspects of demand-side flexibility rules would contribute to the potential to trade volumes across borders and ultimately support Internal Energy Market objectives.

While there is debate about precisely what regulation is needed, there are a number of areas where a network code could help to achieve these objectives:

- *Clarification of roles and responsibilities for the aggregator, supplier and consumer,* for example determining the scope of the balancing responsibility and the relationships between these parties. Regulation may be required, particularly for implementation models where there is no contractual relationship between the independent aggregator and supplier, addressing issues such as the compensation for the open supply position and the imbalance caused by the demand-response activation.

- *Ensuring market access for aggregators, including to ancillary services, capacity markets and to wholesale markets.* Flexibility markets should not be restricted only to ancillary services in the TSO and DSO domain. Some implementation models may not be in line with this or create barriers for aggregators to access the wholesale markets. Rules may be needed to help ensure aggregators have the possibility to extend their activity to *all* electricity markets, including the day-ahead and intraday.

- *Common approaches should also be developed for other aspects necessary for demand-side response through aggregation, including baselining* (i.e. finding the best approximation of the energy consumption or production that would have occurred if no demand-response event had been triggered), measurement and validation (e.g. approaches to quantify the delivered flexibility) and information exchange between the different market roles.

2.3 Other considerations for the development of a potential network code

Stakeholder involvement in the development of the code

Early and comprehensive stakeholder involvement should be prioritised when developing any new network code. Stakeholders must be involved at all stages, and most importantly in the network code drafting working groups from the very start. A dedicated task force could be set up, in addition to the existing for a such as the Smart Grids Task Force, public TSO-DSO workshops and so on. Adequate attention should be given to agreeing a target model which will help to involve stakeholders and ensure a commonly agreed approach.

Strong price signals are needed to help realise the full potential of demand-side flexibility

Finally, while it is out of scope of a potential network code, we would like to underline the importance of ensuring that active consumers can benefit from market price signals, responding to incentives to change their consumption behaviour via explicit and implicit demand response. Regulated retail prices, the relatively high non-energy component of the energy bill, RES support mechanisms, capacity mechanisms, etc. all have the effect of blunting price signals and diminishing the potential of demand-side flexibility.

About

Europex is a not-for-profit association of European energy exchanges with 29 members. It represents the interests of exchange-based wholesale electricity, gas and environmental markets, focuses on developments of the European regulatory framework for wholesale energy trading and provides a discussion platform at European level.

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