

WindEurope response to the European 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)

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WindEurope welcomes the European Commission consultation on the priority list for the development of Network Codes and guidelines on electricity for the period 2020-2023. Our response is structured in three areas:

1. Network Code on Cybersecurity
2. Network Code on Demand Side Flexibility
3. Other electricity Network Codes and guidelines

1. Network Code on Cybersecurity

As power systems across Europe are becoming more digitised, the need to address their cybersecurity and thus protect our security of supply is becoming urgent. **A cybersecurity Network Code should be a priority for 2020-2023.**

Cybersecurity being a borderless issue, any new requirement should not only address cross-border power lines, but power networks in general. The value of Network Codes is to provide harmonised rules across the European Union. Breaking up requirements by Member States will not contribute to increasing the security of national power networks which are increasingly interconnected. Moreover, a harmonised EU Network Code will help the technology and solution suppliers to provide a single solution, rather than adopting individual solutions for each Member State, which would increase development costs and may leave security holes at interfaces. Especially the certification approach shall be common to all Member States.

Given that cross border cooperation among Member States becomes essential to reflect crisis management, we would also welcome guidance from the EC on sharing best practices of cybersecurity implementation and crisis management.

As power generation (centralised and decentralised) and loads are becoming more flexible - providing system services and hence being integral part of the operations and planning of the power system - they should be included in the overall concept. A stepwise approach can be however taken, where the

grid - transmission and distribution - will be first addressed, followed by generation and loads in a second and third step, respectively.

The foreseen Network Code should address and consider the following:

- cover all aspects of the system, from sensors to automation systems and remote-control centres and/or cloud-based systems.
- establish the proper link between some controls of ISO/IEC 27001 and the EU cybersecurity certification of the Cyber Act for ICT digital products, services, and processes, for the sake of consistency.
- the mapping proposed in Table 9 of SGTF EG2 Cybersecurity report¹ is a good starting point to associate sets of controls to proper assurance level as defined in the Cybersecurity Act. A specific initiative should be activated at EU level aiming at defining a consolidated version of this mapping.
- there is a strong necessity to create horizontal standards with a potential international coverage. International standards already existing in a specific area and covering at least partially a targeted domain must be the preferred choice for usage.
- Some other topics that deserve attention are:
 - Supply chain risk management: it could be very helpful to deliver specific guidance for OEMs
 - Definition on Maturity Model based on US National Institute of Standards and Technology (NIST) Framework 1.1²
 - Active participation in early warning systems

WindEurope's Task Force Cybersecurity is working together with the European Network for Cybersecurity and SolarPower Europe to develop architecture specifications for cybersecure distributed energy resources as well as a guideline for the procurement of cybersecure equipment and services in this context. The outcomes of this work will be communicated to the EC (expected in June-July 2020) and should be considered in the development of any requirements directly or indirectly addressing DER units.

¹ Smart Grid Task Force Expert Group 2, "[Recommendations to the European Commission for the Implementation of Sector-Specific Rules for Cybersecurity Aspects of Cross-Border Electricity Flows, on Common Minimum Requirements, Planning, Monitoring, Reporting and Crisis Management](#)", June 2019

² US National Institute of Standards and Technology, "[Framework for Improving Critical Infrastructure Cybersecurity. Version 1.1](#)", April 2018

2. Network Code on Demand Side Flexibility

Demand becomes an integral part of the future power systems providing system services to maintain stability and security of supply. A Network Code for Demand Side Flexibility (DSF) should follow the Network Code for generation developed in the past years. Besides, full integration of DSF into electricity markets is supported under the Clean Energy Package. WindEurope supports a level playing field for all service providers thus it makes sense to harmonise frameworks across Member States.

A Network Code on DSF should be a priority for 2020-2023 to ensure the energy transition is not impeded by the lack of DSF. Considering the accelerated “retirement” of traditional synchronous generators and the rapid build-out of renewable power plants, the volatility in the balancing market will not sustain without DSF brought from the user-end.

We consider that the timeline proposed by the European Commission is realistic. Nevertheless, the work must start as soon as possible accepting that it will unlikely be completed before 2022. Member States are in the process of implementing the Electricity Directive and concretely the articles related to the procurement of flexibility services by DSOs, to independent aggregators, and to energy compensation. Until that date, the transposition of Art. 32 of the Directive (EU) 2019/944 and an evaluation of existing Network Codes could be explored in search of potential gaps and to establish paths for a robust new regulation (if necessary).

A DSF Network Code should establish and consider the following:

- Definitions of flexibility products and the technical requirements for each product.
- Flexibility could come from various sources and at the same time affect and support various network levels. Therefore, it makes sense to have it from the high voltage to low voltage levels (down to the domestic level).
- A market-based approach without exceptions; market engagement rules, validation process (e.g. aggregators deliver as being contracted), remuneration schemes. Market access, including full access to energy market revenue streams is an issue for DSF in some countries (e.g. Ireland) especially when it comes to domestic DSF/micro-generation which is why a Network Code to address this could be timely. Flexibility at local markets should be made available in TSO markets too. The new DSF code should describe the interface to other markets. In fact, this should be an overarching approach of the new code.
- Clear principles shall be established at EU level for standardisation of flexibility market products and pre-qualification rules (e.g. response rate, tolerance bands, activation methods...). A DSF Network Code should enable Member States to be flexible in procuring volumes of EU harmonised flexibility products in function of their different infrastructure, market, financial and strategic characteristics.

- DSF requirements should ensure that DSOs, as defined in the recast Electricity Directive, shall act as neutral market facilitators, and therefore foresee, utilise, oversee, and coordinate the impacts of flexibility operations on their networks.
- Roles should be defined as competitive, without a single buyer or seller and with various market facilitators.
- The Network Code should provide a clear **independent aggregator framework** that integrates the proposals of the Clean Energy Package; a clear procedure for defining the baseline, for both cases when the aggregator is an independent service provider and when it is the supplier. Moreover, the coordination between the independent aggregator and the supplier must be defined and a clear methodology must be established for assigning imbalance payments in this case.
- Guidelines as to what information needs to be shared by the system operators and in which format; interoperability among all players of the system must be harmonised across Europe. WindEurope's Task Force Interoperability is working to develop recommendations for the harmonisation of data communication practices between wind and system operators across Europe. The outcomes of this work will be communicated to the EC (expected in Q4 2020) and should be considered in the development of any requirements directly or indirectly addressing flexibility from units or energy portfolios that include demand and wind generation together. Such data exchange practices could be similarly addressed for demand side assets.
- Any coordination and data exchange between TSOs and DSOs required to avoid harmful interference should be determined among them ensuring that the whole system is operated as efficiently as possible. Cooperation between TSOs and DSOs is key in defining the interface between the commercial and regulatory domain, and disseminating transparently this interface to the market, ensuring a level playing field. It is recommended to initiate this collaboration at Member State level, and to monitor progresses and analyse results at EU level, with the aim to identify synergies and commonalities that might be useful at EU level.
- The EC should encourage Member States to support pilot projects in the imminent years on local flexibility markets with the objective of building scalable DSF services and giving NRAs clear signals to promote efficient and flexible regulatory frameworks. It is also important that NRAs allow regulatory sandboxes to test real use cases, ensuring that DSOs' costs linked with these activities should be fully recoverable. At the same time, it should also define the rules for encouraging DSOs to procure flexibility services as part of their normal operations.

3. Other electricity Network Codes and guidelines

Rules in relation to the provision of non-frequency ancillary services

The current grid connection Network Codes define the needed capabilities from generators and demand players but do not cover how such capabilities (steady state voltage control, inertia, fast reactive current injection, inertia for grid stability, short circuit current, black-start capability and island operation capability) should be procured from the market (payment settlement, tenders, product design, etc.).

Any effort for harmonisation on this issue should consider that different member states have different requirements depending on their level of renewable integration and system requirements. Some of them are already at quite an advanced stage of this market design for non-frequency products (e.g. Ireland), with very high wind penetration levels, so the specific needs of their systems should be stressed in any EU Network Code development effort.

Rules on data exchange, settlement and transparency rules for generation unit's unavailability, availability and use of networks, congestion management measures and balancing market data

The System Operation Guideline (and the KORRR methodology³) set some rules regarding data exchange between generation units and system operators. There is very little effort for harmonisation across Europe which is not cost-effective for wind developers/operators. **No new Network Code should be necessary but there is certainly a need to work on harmonising the national implementations across Europe (e.g. to develop Guidance Implementation Documents) as this will be crucial both to cybersecurity and DSF requirements. This should be a priority for 2020-2023.** The existing guideline and the KORRR methodology are not yet fully implemented in the field. Data access and data exchange rights forms the foundation of future development of the power systems in EU. We need to gain more clarity in this area.

Rules on network tariffs

WindEurope supports the efforts to align network tariffs structure. Non-harmonised tariffs lead to investment distortions and hold back an efficient deployment of wind renewable energy in Europe. The annual costs borne by generators (G-charges) should be harmonised – where they exist –, based on energy (€/MWh), and ultimately phased out.

For all Network Codes, it is crucial to involve the industry at an early stage in the drafting process, to make sure the new requirements proposed are realistic, understood by all players in the sector and implemented rapidly once finalised and approved.

³ ENTSO-E, "[All TSOs' proposal for the Key Organisational Requirements, Roles and Responsibilities \(KORRR\) relating to Data Exchange in accordance with Article 40\(6\) of Commission Regulation \(EU\) 2017/1485 of 2 August 2017 establishing a Guideline on Electricity Transmission System Operation](#)", February 2018