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# **European Commission's consultation on the establishment of 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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A Eurelectric response paper

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

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

### We stand for

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

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

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

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

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

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

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

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

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WG Institutional Frameworks  
WG Business Model & Network Customers  
WG Technology  
WG Market Integration and Network Codes  
WG Retail Market Design  
WG Power & Gas Interactions

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## General comments

The European Commission (EC), ENTSO-E, ENTSOG, ACER and European stakeholder organisations have devoted considerable time over the past few years to the development of European Framework Guidelines (FG), Network Codes (NCs) and Guidelines for electricity and gas.

Hence, in Eurelectric's opinion, any changes in terms of new NCs and amendments to existing ones should be carefully considered, as it could affect ongoing implementation processes such as Day-Ahead and Intra-Day coupling, 15-minutes imbalance settlement period, balancing energy platforms or cooperation in exchanges and sharing of balancing capacity.

Therefore, Eurelectric calls for careful consideration of all new NCs so as not to overlap or contradict existing ones.

The implementation of NCs is a demanding target for the entire electricity sector. As a starting point, policy makers with the support of the electricity industry need to assess what issues need to be harmonized and regulated at European level or at national level and whether those issues have any cross-border impact. Moreover, the need for new or updated NCs must consider a period to be implemented.

The EU DSO Entity as well as the relevant concerned stakeholders should be closely involved in the process in accordance with the Electricity Regulation (EU) 2019/943 (Art. 59 § 3 and 10). Given the fact that the EU DSO Entity will not be fully operational before early 2021, it might create a discrepancy between the scheduling for the creation of the EU DSO Entity and the launch of new NCs and guidelines when they are relevant for DSOs. Therefore it is important to maintain the role of DSOs, especially through the TSO-DSO Platform temporarily, irrespective of the date of completion of the EU DSO Entity, into the future process and development of NCs and Guidelines in accordance with the spirit of the Electricity Regulation (EU) 2019/943. It is equally important that the other stakeholders are involved in the NC's drafting process from the beginning as required by the new procedures set up by the Electricity Regulation (EU) 2019/943.

In addition, information from the EC on the revision of existing NCs and Guidelines ("if needed") is currently rather imprecise. For the sake of transparency, stakeholders (including at least suppliers, generators and traders) should be thoroughly consulted and informed on the planned changes especially to CACM or balancing Guidelines, as this will impact ongoing developments in the field of energy markets. Stakeholders should be involved in relevant drafting teams and thoroughly informed e.g. via the Market European Stakeholder Committee.

Finally, the implementation process of existing NCs and the consistency between existing and potential future NCs should be ensured. If a clear misalignment between existing NCs and their implementation is already detected, the EC and ACER should amend accordingly the NC texts. This task is extremely important to foster the consistent pan-European implementation of the NCs.

## Specific comments

### **Priorities regarding electricity networks rules for the period 2020-2023 (and beyond)**

- **As regards the EC proposal to develop a NC on cybersecurity**

In our daily lives, we depend on the availability of energy. For the system operators, both at transmission and distribution level, managing the networks to ensure a permanent match between consumption and production - and doing it without compromising system operation security and

safety of system operator's employees - requires a continuously increasing degree of digitalisation. This digitalisation is also noticeable from the consumer side as digitised and Smart Systems are of great value and enable consumers to use a bright new range of home appliances like smart home infrastructures, charging infrastructures for cars and other innovative technologies. With all those new systems connected to the once grid, cybersecurity is an important cornerstone for the setting-up of a secure and available grid infrastructure.

As a result of the Directive on security of network and information system ("NIS") (EU) 2016/1148, all Member States had to define minimum security standards for all operators of essential services notably based on the Annex II in the energy sector/subsector electricity both DSOs and TSOs. Many countries have introduced those requirements based on ISO/IEC 27001, sector specific CSIRTs and in the strengthening of public-private partnerships to identify the risks and agree on the measures to be taken.

While there is no single-sweep solution to making the EU fully cyber secured, Eurelectric's recommendations outlined hereafter aim to provide an overview of the practical policy and regulatory actions that might form part of a comprehensive package of measures to be up taken in the NC by EU policymakers:

- Firstly, Eurelectric recommends the further development of a NC on cybersecurity, within the timeline proposed by the SC and which will be aligned with the already existing countrywide regulations that are currently in place and mentioned above, as well as the Emergency and Restoration Network Code (EU) 2017/2196 to fix a common approach for all TSOs and DSOs within the EU.
- As a first step to establish the scope of the NC, Eurelectric suggests to critically assess all recommendations of the European Smart Grid Task Force (Expert Group 2) "Recommendations to the EC the Implementation of Sector-Specific Rules for Cybersecurity Aspects of Cross-Border Electricity Flows, on Common Minimum Requirements, Planning, Monitoring, Reporting and Crisis Management" report.
- When considering the scope of the NC, two aspects should be highlighted :
  1. First, certification: any new framework should ensure a "continuum of trust" while preserving existing national certifications.  
Therefore, Eurelectric recommends a holistic approach to the national/individual cybersecurity certification, incorporating all EU relevant legislation, processes and technology features. Article 51 of the Cybersecurity Act states that cybersecurity certification schemes must achieve a number of objectives. Eurelectric highly encourages the EC to issue the NC on Cybersecurity in coherence with the mentioned objectives.  
It is recommended that the NC proposes a methodological guidance for the players to handle their overall responsibility/liability rather than a range of "micromanagement" solutions. Given the size and number of possible parts of the overall energy system, the most effective approach would be to agree on a methodology to develop a simplified model and some minimum requirements to be applied to different elements of the power system.

Thus, a European-level certification standard for the missions of a DSO, particularly as an energy data operator, would constitute a useful frame of reference capable of strengthening trust and facilitating the implementation of these missions at national level. A NC could certainly outline the main objectives of cybersecurity for a DSO as operator of network and energy data.

Nevertheless, a NC may not cover all the gaps. For example, enforcing telecoms or aspects related to individual architectures or testing requirements cannot be achieved via a NC.

Finally, if only focusing on standards and certification, the best way to ensure the compliance to the NC is to include at every stage all stakeholders in a trusted partnership, like e.g. the public-private ones.

2. Then, risk-management aspects should be addressed, where operating rules and sharing rules must be specified. In this regard, OES should form a network to share operational information when it doesn't interfere with State issues.

ENISA must ensure the overall coherence of the approaches and schedules of Member States. The European Cybersecurity Competence Centre may ensure the technical coherence of the different classes / technical modalities / certification report published in Europe.

- The NC shall address the cybersecurity aspects of the electricity system as a whole, thus considering the cascading risks arising from interconnections between system operators and other stakeholders such as service providers.
- Due to the EU and Member States certification schemes, organizations should settle a migration plan of existing infrastructure to new levels of certifications, should they be introduced. Cybersecurity “labelling” should be considered as an intermediate phase to bridge the gap between the preemption of some existing certification, and the availability and practicality of some future new coming certification scheme. Eurelectric encourages the EC to address NRAs to oversee that migration plans are based on a risk analysis and that there is an alignment between the timing of the migration plan and the amount of Capex and Opex defined by NRAs for these migrations.
- Such a code would however require both a clarification of the respective tasks of the NRAs and cybersecurity agencies. Any potential transfer of responsibilities toward European level should be scrutinized. NRAs should encourage operators to meet compliance with the NIS Directive and also, to provide support in transposing horizontal regulation into sector-specific best practices. Competent authorities would notably monitor and evaluate cybersecurity expenditures of regulated entities.
- As the energy system is composed of a large number of different components that vary frequently, Eurelectric highly encourages the EC to define a risk level matrix to accurately identify and prioritize threat sources, serving also as an impact guidance. These threats sources should be recurrently updated alongside with the evolution of the digital context (e.g. AI, ML, Cloud, IT/OT convergence) and receive input from the early warning system.
- There is a strong necessity to create horizontal standards with a potential international coverage. Thus, horizontal standards (multi sectorial) for cybersecurity must be privileged in cybersecurity evaluation but also in other domains. 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 a high level of attention are :
  1. Supply chain risk management; with emphasis on delivering specific guidance for OES
  2. Active participation in early warning systems
- Eurelectric recommends to target the efficiency and the feasibility of the measures. In any case, the defence of private or commercial interest has not a place in the definition of these guidance. Indeed, many standards and certification schemes exist with different specific target or purpose. There is not one of those able to serve the new overall purpose. Therefore, the most effective way would be to short select ready to use immediately by the industry an exclusive very limited number of complementary standards families which use can be mixed and matched by each

utility. Market participants should be able to choose the most relevant combination of certification schemes to their specific situation. This would request to establish an agreed equivalence table between these standards sets regarding security levels/proof strength levels. In this context, Eurelectric recommends that the NC proposes a methodological approach for the energy players in order for them to handle their overall responsibility / liability rather to a set of micromanagement solutions or standards. These would imply to rely on a deterministic approach as a first step in order to define minimum requirements on both the security level and the assurance level (strength of proof) for the main critical parts of each energy sector ecosystems. This would constitute a straightforward tool for European market participants that may ensure faster implementation compared to a probabilistic approach which may take time to reach a consensus and prove to be costly or even be too complex and impossible to carry out on such a large scope for the entire energy sector.

- Finally, it is of the utmost importance that the first objective of any energy cyber security guidance is the resilience of the overall service from end to end expected by the customers. This implies a systemic approach of the sector including generation, transmission, distribution, wholesale market and retail activities, each of them being constitutive of a full ecosystem. Securing only parts of the energy systems may not prove to be efficient considering cyber security threats from a security of supply point of view. For this reason, the development of common cyber security guidance in the frame of the NC requires the involvement of stakeholders from all these ecosystems.

- **As regards the EC proposal to develop a NC on « Demand side flexibility »**

The two fundamental goals of the Clean Energy Package are to ensure efficient integration of renewable energy sources through effective operation and appropriate development of networks, as well as to create a European market with non-discriminatory participation of flexibility providers such as generators, storage, active consumers, local energy communities or aggregators. In this context, and under consideration of Article 32 of the Electricity Directive (EU) 2019/944, flexibility procurement by the two system operators is a means to achieve both.

In view of achieving these goals, and in accordance with the article 59(1) (e) of the Electricity Regulation, the EC has the possibility to establish a NC focusing on “demand side flexibility”.

As a starting point, Eurelectric recommends first clarifying the definition of « demand side flexibility ». Eurelectric believes that the term “demand side flexibility” covers two issues which should be clearly differentiated:

- The explicit “demand side response” through aggregation, as already tackled in Article 17 of the Electricity Directive (2019/944). In particular, paragraph 2 refers to non-discriminatory “ancillary services” procurement by TSOs and DSOs especially for market participants engaged in aggregation of demand response. Hence, Eurelectric believes that a possible NC should not focus on existing market rules between market parties among themselves for demand side response and aggregation that are implemented at national level.
- The issue of flexibility i.e. How essentially the network operators (TSOs and DSOs) procure flexibility in order to solve, among others, congestion in their grid areas and better operate their networks. From that perspective, ‘flexibility’ is not restricted to demand-side response but encompasses all sources of flexibility (generation, storage, etc.). Having assessed the potential for an optimal use of flexibilities, network operators should be able to procure all those solutions from market-based resources – provided they meet the technical requirements – on non-discriminatory terms, so as to ensure that they all compete on a level-playing field. Thus, Eurelectric believes that a possible NC should focus on arrangements for the procurement of flexibility for purposes other than balancing by the DSOs and TSOs through all the possible flexibility solutions, notably through aggregation.

These kinds of flexibility services provided by the flexibility service providers both at TSO and DSO level are enshrined in the whole Electricity Directive (2019/944). In the case of DSOs, Eurelectric has recently published a set of recommendations how to best implement article 32 of the Electricity Directive (2019/944)<sup>1</sup>. On this regard, it is also fundamental that a future regulatory vehicle allows DSOs to be always in control of the use of congestion management services provided by DERs connected to their grids.

Eurelectric would like to point out that numerous developments regarding flexibility procurement at distribution level are under way in many countries, mostly in form of pilot projects. The level of development varies from one Member State to another: if some Member States are currently testing market-based flexibility procurement with pilot projects, a few others have already developed economically and technically feasible solutions to build proper local flexibility market arrangements at national level. Eurelectric believes that the EC should encourage Member States to support such pilot projects in the forthcoming years, with a focus on building scalable services, thus giving NRAs clear signals to promote efficient and flexible regulatory framework. Nevertheless, on mid-term NRAs should also define the rules, which will encourage DSOs to procure flexibility services as part of their normal operations, as this is the ultimate goal.

In addition, and in accordance with article 71 “Transposition” of the Electricity Directive (2019/944), Members States shall bring into force regulations and administrative provisions necessary to comply with Article 17 “Demand response through aggregation” and Article 32 “Incentives for the use of flexibility in distribution networks” by 31 December 2020. Therefore, Eurelectric highlights that the priority over the short term is to put a proper transposition of the provisions related to flexibility at national level.

Given the above, Eurelectric recommends following a sequential process by starting with an assessment to identify where gaps currently exist on this topic and whether these gaps can be filled by any other measure than a dedicated new NC.

If the above mentioned assessment has established the need to draft new common rules on “demand side flexibility” in form of a NC, Eurelectric would like to stress the need to include the whole spectrum of stakeholders in the power sector including wholesale and retail markets in the process. Market players will bid their flexibility and are key stakeholders needed to ensure an efficient and market friendly approach.

In particular, Eurelectric highlights the need of a strong involvement of retailers and aggregators as way to ensure an efficient consideration of consumer’s need. A proper framework incentivizing electrification at consumer level should thus be encouraged as a prerequisite in order to maximize the flexibility potential of the system.

Therefore, visibility should be given to market parties and both operators’ needs should always be communicated timely, properly and in a transparent manner in both the long and short terms notably when designing the flexibility products, at least at a national level. At the same time it should be noted that flexibility solutions are not always referring to products that the DSOs or TSOs must purchase in a market-based approach, but can as well include technical solutions just using grid assets, tariff solutions, connection agreement solutions and rule-based solutions (e.g. curtailments) to ensure that next to market based approaches social welfare provided by regulated networks is always maximized. These are needed to allow efficient flexibility procurement, create a supportive environment and design a market-based procurement approach in dialogue with stakeholders.

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<sup>1</sup> [Eurelectric recommendations on the use of flexibility in distribution networks \(article 32 of the Electricity Directive\), April 2020](#)

Eurelectric recommends to first establish a definition of “flexibility” which distinguishes between existing flexibility provision via energy markets and balancing markets and flexibility in terms of congestion management (redispatching). Moreover, and to avoid new discrimination or market distortion, Eurelectric strongly believes it should be avoided to develop a technology specific NC that might create unnecessary lockdowns, where there is still room for further innovation.

Insofar, as there is no “one size fits all” model, Eurelectric believes that such European rules should provide a set of common overarching principles ensuring a coordinated access to resources and allowing their optimal utilisation. Those common principles should apply to every voltage level and shall be established at European level, while nonetheless allowing national variations to reflect differences between networks in terms of customers’ density, line’s length, network physical capacity, voltage level and potential to connect decentralised electricity resources. Therefore, a national approach, conforming to clear European principles, should allow NRAs and stakeholders to agree more efficient customised solutions for all beneficiaries, while ensuring security of supply and minimising the risk of hampering innovation or competition.

### **Priorities regarding gas networks rules for 2020 (and beyond)**

Eurelectric fully agrees with the EC proposal of not adding any new items on the priority list for 2020 for the development of harmonised gas rules but rather to focus and push forward on the full and correct implementation of the existing market rules at Member State level.

Finally, Eurelectric stresses the need for a stricter coordination among the NRAs when they set their transmission tariff rules with the aim of avoiding distorting gas price formation across different EU countries and a pancaking effect.

In the post 2020 timeframe, a harmonized network tariffication system including potential new gas carriers (e.g. biomethane, hydrogen etc.) should be developed to assure a common approach at EU level.

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

**Economic Development**

- Growth, added-value, efficiency

**Environmental Leadership**

- Commitment, innovation, pro-activeness

**Social Responsibility**

- Transparency, ethics, accountability



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