

Consultation Questionnaire on the Draft Framework Guideline on sector-specific rules for cybersecurity aspects of cross-border electricity flows

Fields marked with * are mandatory.

General introduction

The purpose of the non-binding Framework Guideline (FG) is to set high-level principles that should be further elaborated in the Network Code on sector-specific rules for cybersecurity aspects of cross-border electricity flows.

The role of the FG and of the following network code, is to supplement and further specialise existing cybersecurity and risk preparedness directives and regulations, introducing viable solutions to identified cybersecurity gaps and risks.

The objective of the network code, based on the draft FG principle, should be to solve, mitigate and prevent the potential high impact or materialization of cybersecurity risks, as well as to prevent those cybersecurity attacks or incidents that may impact real time operations (causing cascade effects).

ACER invites all concerned stakeholders to contribute to the public consultation, and therefore to define and shape the final Framework Guideline.

Next steps:

- ACER will analyse the responses received in July 2021 and will deliver a final version of the FG to the European Commission.
- In July 2021, ACER will publish a summary of the consultation, including an evaluation of the responses.
- ACER will publish all responses received and the identity of their respective stakeholders (unless stated otherwise). For this reason, please indicate if your response may be publicly disclosed or not, and if you agree with the data protection policy.

All concerned stakeholders are invited to respond to the public consultation on the proposed Framework Guideline.

The public consultation will run between 30 April 2021 to 29 June 2021 at 23:59 Ljubljana Time.

ACER will only accept responses in electronic format, no other format will be accepted. **In case of technical problems with the submission of your responses please contact DFG-NC-CS@acer.europa.eu.**

ACER will organise a workshop to introduce and explain the content of the proposed Framework Guideline, in May 2021. More information will be circulated via ACER Infoflash closer to the date of the event.

* First Name

* Last Name

* Company/Institution

* Type of business

Address

* Contact email

Phone

Country

I confirm that I have read the [data protection notice in this link and accepted.](#)

- Yes
- No

I authorise the disclosure of my identity together with my response

- Yes
- No (I want my response being completely anonymous)

1. Meeting the general objectives

Question 1 - Does the Framework Guideline contribute to the following objectives?

	Yes	No
To further protect cross-border electricity flows, in particular critical processes, assets and operations from current and future cyber threats?	<input checked="" type="radio"/>	<input type="radio"/>

To promote a culture that aims to continuously improve the cybersecurity maturity and not to simply comply with the minimum level	<input checked="" type="radio"/>	<input type="radio"/>
To mitigate the impact of cyber incidents or attacks or to promote preparedness and resilience in case of cyber incidents or attacks?	<input checked="" type="radio"/>	<input type="radio"/>
To support the functioning of the European society and economy in a crisis situation caused by a cyber-incident or attack, with the potential of cascading effects?	<input checked="" type="radio"/>	<input type="radio"/>
To create and promote trust, transparency and coordination in the supply chain of systems and services used in the critical operations, processes and functions of the electricity sector?	<input checked="" type="radio"/>	<input type="radio"/>

Please, provide a short explanation justifying your assessment, if needed:

600 character(s) maximum

tiko believes that the present Draft Framework Guideline can lead to a higher level of cybersecurity in the European electricity system. We welcome the inclusion of all relevant actors, including new actors such as aggregators and storage operators. When developing the Network Code, it will be important to consider the fundamental differences between the established and well-known actors of the electricity system and new businesses covering demand-side-response and aggregation.

Question 2 - Do you see any gaps concerning the cybersecurity of cross-border electricity flows which the draft FG proposal should address?

- Yes
 No

If yes, provide details

600 character(s) maximum

The electricity system will be more decentralized (assets) and simultaneously more centralized (aggregation in clouds), and the measures for cybersecurity must be appropriate for this unprecedented and unfamiliar situation. The focus of all existing documents is still too strongly on the traditional technologies and actors. In addition, we are concerned that the definition of aggregators is too narrow, considering only aggregators participating in electricity markets. This leaves large aggregations without any supervision, posing a considerable threat to the system.

2. Scope, applicability and exemptions.

Question 3 - The draft FG suggests that the Network Code shall apply to public and private electricity undertakings including suppliers, DSOs, TSOs, producers, nominated electricity market operators, electricity market participants (aggregators, demand response and energy storage services), ENTSO-E, EU-DSO, ACER, Regional Coordination Centres and essential service suppliers (as defined in the FG). Does the FG applicability cover all entities that may have an impact on cross-border electricity flows, as a consequence of a cybersecurity incident/attack?

- Yes
 No

Please, explain who is missing and why

600 character(s) maximum

All companies with large aggregated pools connected to the power system should be covered by the regulation, irrespective of the fact that they carry a market function or not. Such companies (e. g. OEMs for PV or EV) create the same level of risk whether they participate in the electricity market or not and should not go without any supervision. This should be clarified already in the FG.

3. Classifications of applicable entities and transitional measures

Question 4 - The proposed FG prescribes a process to differentiate electricity undertakings based on their level of criticality/risk, and setting different obligations depending on their criticality/risk level. This will imply a transition period until the full system is established and will require the establishment of a proper governance to duly manage the entire risk assessment process. Do you think that the proposed transition is the most appropriate?

- Yes
 No

Would you suggest another transition approach and why?

600 character(s) maximum

tiko agrees with the general transition process. However, considering the lack of knowledge and experience with new business models among the traditional stakeholders, we consider it appropriate to coordinate the transition period more closely at EU level. TSO and DSO should be supported in assessing the risks of new business models involving aggregation of small assets. This requires close involvement of the industry.

Question 5 – The FG proposes that all small and micro-businesses, with the exception of those that, despite their size, are defined as important/essential electricity undertakings, shall be exempted from the obligations set in the NC (excluding the general requirements for cyber hygiene). Do you think this approach is consistent with the general idea to uplift and harmonise the cybersecurity level within the ecosystem in order to efficiently protect cross-border electricity flows?

- Yes
 No

Please, explain why:

600 character(s) maximum

The proposed approach for small and micro-businesses is reasonable. For new business models, including demand side response and aggregation, it is important to note that it is not only the size of their portfolio that matters, but also the type of devices and how they are connected and switched (e. g. reaction time). A differentiated approach is needed.

4. Cybersecurity security governance

Question 6 - Do you find that the proposed FG succeeds in establishing a sound governance for the overall process of ensuring the cybersecurity of cross-border electricity flows?

- Yes
 No

What is missing and where do you think ACER should put more attention to?

600 character(s) maximum

We welcome the proposed governance based on existing processes and established stakeholders. However, as mentioned above, the established stakeholders lack the knowledge and experience in new business models to properly estimate the risk of these models. The overwhelming role of system operators is understandable considering the traditional (gradually disappearing) power system but is not appropriate anymore to prepare for future threats. The governance of the Network Code should be adapted accordingly.

Question 7 – The proposed FG describes the process and governance to determine the conditions to classify and distinguish electricity undertakings with different risk profiles for cross-border electricity flows. Is the decision on setting up the conditions assigned to the right decision group or should that decision be taken at a higher strategic level in respect to what is proposed in the draft, having in mind that this decision will be extremely sensitive?

- Yes, the decision is taken by the right decision group.
 No, the decision shall be taken at a higher strategic level.

Please, explain shortly by whom and your reasoning:

600 character(s) maximum

We suggest that decisions on methodologies, risk levels and thresholds be made by those groups and actors who have the necessary knowledge and experience. We doubt that this is adequately reflected in the proposed governance. Additional guidance on EU level might be needed to assess the risk of new business models, including demand side response and aggregation.

Question 8 – Please, tell us which aspects of the proposed governance may better be developed further.

Per each line covering the governance aspects of each chapter, please select all statements that can fit.

	Roles are defined	Responsibilities are assigned	Authorities are defined	Accountability is clear	High level decisional processes are defined
General Governance	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cross Border Risk Management	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Common Electricity Cybersecurity Level	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Essential information flows, Incident and Crisis Management	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other aspects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please, add comments in case you may suggest changes to the attribution of roles, responsibilities, authorities, and to the envisaged processes, where described.

600 character(s) maximum

There are still many open questions how methodologies, ECRIs and thresholds are defined and implemented. The involvement of all relevant stakeholders should be described in more detail.

5. Cross border risk management

Question 9 – The draft FG proposes a high-level methodology for cross border risk assessment presented in chapter 3 and based on three consecutive levels. Is this high-level methodology adequate for assessing and managing risks of cross-border electricity flows?

- Yes
- No

Would you suggest any alternative way to proceed?

600 character(s) maximum

In general, we agree with the proposed methodology. A proper involvement of all relevant stakeholders and inclusion of all risks (also stemming from new business models) should be granted.

Question 10 - Do you think that the FG covers the risks that may derive by the supply chain?

- It covers too much.
- It covers fairly.
- It covers fairly, but the tools and means shall be clearer.
- It covers poorly.

5. Common Electricity Cybersecurity Level

Question 11 - Considering the 'minimum cybersecurity requirements' (with regard to Table 2 of the FG), select just one option:

- They are applied to the right entities, they are proportional, and they fit with the purpose to protect cross-border electricity flows from cybersecurity threats.
- They are applied to the right entities, they are proportional, but they do not fully fit with the purpose to protect cross-border electricity flows from cybersecurity threats.
- They are applied to the right entities, but they are not proportional, and they partially fit with the purpose to protect cross-border electricity flows from cybersecurity threats.
- They are applied to the wrong categories.

Question 12 - Considering the 'advanced cybersecurity requirements' (with regard to Table 2 of the FG), select just one option:

- They are applied to the right entities, they are proportional, and the fit with the purpose to protect cross-border electricity flows from cybersecurity threats.
- They are applied to the right entities, they are proportional, but they do not fully fit with the purpose to protect cross-border electricity flows from cybersecurity threats.
- They are applied to the right entities, but they are not proportional, and they partially fit with the purpose to protect cross-border electricity flows from cybersecurity threats.
- They are applied to the wrong category and entities.

Please, explain your reasoning for your answer to question 11 and 12, if necessary

600 character(s) maximum

Question 13 - Please select the option(s) which in your view better represent how a common cybersecurity framework protecting cross-border electricity flows, should be established and enforced?

- Through common electricity cybersecurity level that shall be certifiable by a third party (e.g. by the application of ISO/IEC 27001 certification).
- The framework shall be based on a set of agreed requirements that shall be assessed, and their implementation shall be subject to governmental inspections.
- A peer accreditation process shall be established, where electricity undertakings evaluate each other against a set of agreed requirements set by governmental authorities.
- A combination of those above.
- Another better solution.

Please, briefly describe it:

600 character(s) maximum

We welcome that the Network Code shall rely on existing, and widely used standards, certified by an independent third party. The EPSMM seems to be an appropriate first step to map the existing standards. However, tiko considers the EPSMM not enough to ensure interoperability of cybersecurity requirements and standards, and we recommend further harmonization in the form of an ECMM.

Question 14 - The proposed FG extends the obligation of the cybersecurity measures and standards to “essential service suppliers” to which an entity may outsource essential services, operations of essential assets and services, or a full essential process, that has an impact on the cybersecurity of cross-border electricity flows. Do you think this approach is correct?

- Yes
- No

Please, explain why:

600 character(s) maximum

The proposed extension is welcome. It should take into account cases where a company can be an essential entity and at the same time an essential service supplier.

6. Essential information flows, Incident and Crisis Management

Question 15 - The FG proposes the use of designated Electricity Undertaking Security Operation Centre (SOC) capabilities to enable information sharing and to smooth incident response flows from all electricity undertakings in order to:

- Provide agility to all electricity undertakings with respect to sharing and handling important cybersecurity information for cross-border cybersecurity electricity flows;
- Avoid interference and additional workload on the National CSIRTs and to their existing cooperation;
- Promote a responsible, autonomous, flexible, timely, coordinated and controlled approach to information sharing and incident handling, in line with current electricity practices and in line with the specific operational needs.

Considering the proposed approach, please select one option:

- The proposed approach is feasible, can foster trust and provide enough flexibility and reliability, which are essential for the cross-border electricity flows.
- The proposed approach is feasible and can foster trust but it is not ideal for meeting the requested flexibility and reliability level.
- The proposed approach is feasible, but can hardly foster trust and it is not ideal for meeting the requested flexibility and reliability level.
- The proposed approach is not feasible, therefore needs to be reviewed.

Question 16 – The draft FG proposes the adoption of SOC to overcome other needs that go beyond the simple information sharing:

while it will offer the possibility to let the electricity sector to autonomously structure the information sharing infrastructure, ideally sharing resources and cooperating with the aim to reduce costs, offering high-end cybersecurity protection to cross border electricity flows, the same SOC may be delegated to other certain tasks for which a SOC is better placed in order to offer services (e.g. orchestrating cooperation with other CSIRTs, providing support in planning and execution of cybersecurity exercises, support and cooperate with critical and important electricity undertakings during crisis management situations and more);

Do you think that this secondary role is appropriate for the SOC?

- Yes
- No

Please, provide your reasoning:

600 character(s) maximum

As a principle, SOC should be delegated the proposed tasks. However, we suggest not to establish a strict rule. Further clarification regarding perimeters, roles and responsibilities are needed.

Question 17 - Do you believe a Cybersecurity Electricity Early Warning System as described in the proposed FG chapter 5.4 is necessary?

- Yes, it is necessary.
- No, it is not necessary.

Please, provide the reasoning:

600 character(s) maximum

We consider such an Early Warning System appropriate, but it must be consistent with the approach in NIS2.

Question 18 - Concerning the obligation for essential electricity undertakings to take part to cybersecurity exercise as described in chapter 6 of the draft FG, please select one of the following options:

- It is in line with the objectives, and it contributes to the substantial improvement of the cybersecurity posture necessary for cross-border electricity flows.
- It is in line with the objectives, and it contributes to the substantial improvement of the cybersecurity posture necessary for cross-border electricity flows, but the applicability should be extended to all electricity undertakings.
- It is in line with the objectives, but it does not really contribute to the improvement of the cybersecurity posture necessary for cross-border electricity flows.
- It is not in the objectives, and it should be abandoned.

Please, briefly describe the reasoning behind your choice:

600 character(s) maximum

Regular cybersecurity exercises are important to improve the preparedness of the electricity sector. Care should be taken to balance costs and benefits (especially for small companies) and to allow sufficient time for the common evaluation of the exercises.

7. Protection of information exchanged in the context of this data processing

Question 19 - The proposed FG provides for rules to protect all information exchanged in the context of the data processing concerning the network code.

Considering the proposed rules and principles, please select one of the following options:

- The proposed rules and principles are appropriate and cover all aspects needed to secure the information exchanges in the context of the network code.
- The proposed rules and principles are appropriate but miss some additional aspects needed to secure the information exchanges in the context of the network code.
- The proposed rules and principles are not appropriate and miss many additional aspects needed to secure the information exchanges in the context of the network code.
- The proposed rules are excessive, and a relaxation of rules and principles is suggested.

Please, describe the reasoning behind your choice:

600 character(s) maximum

8. Monitoring, benchmarking and reporting under the network code on sector-specific rules for cybersecurity aspects of cross-border electricity flows

Question 20 - The proposed FG suggest monitoring obligations to verify the effectiveness in the implementation of the NC. In this respect, do you think they are appropriate?

- The proposed monitoring obligations are appropriate and they cover all aspects needed to carefully monitor the implementation of the network code.
- The proposed monitoring obligations are appropriate but they do not cover all aspects needed to carefully monitor the implementation of the network code.
- The proposed monitoring obligations are not appropriate and they do not cover all aspects needed to monitor the implementation of the network code.
- The proposed monitoring obligations are excessive, and a major revision of the principles is suggested.

Please, describe the reasoning behind your choice

600 character(s) maximum

Assessments of the contribution of the Network Code to the EU objectives on cybersecurity should be made regularly. In particular, the constantly changing threat situation and the corresponding countermeasures must be reassessed on a regular basis. Also within the framework of the NC, rapid changes of methodologies and requirements must be possible.

Question 21 - The proposed FG suggests benchmarking obligations to control the efficiency and prudence in cybersecurity expenditure, resulting from the implementation of the NC. Moreover, benchmarking, together with the identification of cybersecurity maturity levels of electricity undertakings, may constitute the grounds to further incentivise cybersecurity culture for cybersecurity electricity flows in the future.

In this respect, do you think that the benchmarking obligations are appropriate?

- The proposed benchmarking obligations are appropriate and cover all aspects needed to monitor the efficiency and prudence in cybersecurity expenditure during the implementation of the network code.
- The proposed benchmarking obligations are appropriate but they do not cover all aspects needed to monitor the efficiency and prudence in cybersecurity expenditure during the implementation of the network code.
- The proposed benchmarking obligations are not appropriate and they do not cover all aspects needed to monitor the efficiency and prudence in cybersecurity expenditure during the implementation of the network code.
- The proposed benchmarking obligations are excessive, and a major revision of the principles is suggested.

Please, describe the reasoning behind your choice:

600 character(s) maximum

We welcome the proposed benchmarking, especially with a focus on unnecessary burdens for new business models. The assessment should also cover the transitional period.

Question 22 - The proposed FG suggests reporting obligations: the aim of the reporting obligations is to facilitate informed high-level decisions on the revision of the network code.

Considering the proposed reporting obligations, please select one of the following options:

- The proposed reporting obligations are appropriate and cover all aspects needed to monitor the achievement of the objectives of the network code.
- The proposed reporting obligations are appropriate but they do not cover all aspects needed to monitor the achievement of the objectives of the network code.
- The proposed reporting obligations are not appropriate and they do not cover all aspects needed to monitor the achievement of the objectives of the network code.
- The proposed reporting obligations are excessive, and a major revision of the principles is suggested.
- The proposed reporting obligations are very limited, and a major revision of the principles is suggested.

Question 23 - Do you think the proposed FG sufficiently cover cybersecurity aspects of:

	Partially covered	Fairly covered	Substantially Covered	Fully covered
Real-time requirements of energy infrastructure components.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Risk of cascading effects.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mix of legacy and state-of-the-art technology.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Question 24 - Do you have any other comment you want to share and that are not included in the previous questions, with regard to the rest of the content of the draft FG ?

1000 character(s) maximum

tiko supports a high common level of cybersecurity to ensure trust in prosumer business models by making sure that the electricity system as well as prosumers themselves are protected against cybersecurity risks. This is key to support consumer empowerment and active participation in the clean energy transition, notably through demand-side flexibility, in line with the Green Deal objectives.

We highly recommend involving all relevant actors, especially from new businesses, consequently and proactively in the drafting process of the Network Code. This is the only way that the Network Code can provide an efficient answer to the challenges the grid, system operators and service providers are facing. Correspondingly, tiko is asking ACER to set up an Expert Group as done for the Network Code on DSF.

Contact

[Contact Form](#)

