

Public consultation on ACER's Framework Guidelines on the joint scenarios for electricity and gas network development plans ("Scenarios Guidelines")

Fields marked with * are mandatory.

Introduction

This consultation of the European Union Agency for the Cooperation of Energy Regulators ('ACER') is addressed to all interested stakeholders.

The purpose of this survey is to collect specific and concrete views from the public on the draft Scenarios Guidelines and inform ACER's decision-making process for adopting the Guidelines by 24 January 2023.

The draft Guidelines are available [here](#). The consultation questions directly refer to this document. Replies to this consultation should be submitted by Monday **14 November 2022, 23:59 hrs (CET)**

Data Protection and Confidentiality

ACER will process personal data of the respondents in accordance with [Regulation \(EU\) 2018/1725](#), taking into account that this processing is necessary for performing ACER's consultation tasks.

More information on data protection is available on [ACER's website](#).

ACER will not publish personal data.

Following this consultation, ACER will make public:

- the number of responses received;
- organisation names, except those with a valid reason for not having their organisation name disclosed;
- all non-confidential responses;
- and ACER's evaluation of responses.

You may request that (1) the name of the organisation you are representing and/or (2) information provided in your response is treated as confidential. To this aim, you need to explicitly indicate whether your answers contain confidential information, and also provide a valid reason if you want that the name of your

organisation remains confidential.

You will be asked these questions at the end of the survey.

1. Respondent's Data

* 1. Name and surname

* 2. Email

* 3. Organisation

* 4. Country of your organisation

- ☐ [xx] - All EU Member States
- ☐ AT - Austria
- ☐ BE - Belgium
- ☐ BG - Bulgaria
- ☐ HR - Croatia
- ☐ CY - Cyprus
- ☐ CZ - Czechia
- ☐ DK - Denmark
- ☐ EE - Estonia
- ☐ FI - Finland
- ☐ FR - France
- ☐ DE - Germany
- ☐ GR - Greece
- ☐ HU - Hungary
- ☐ IE - Ireland
- ☒ IT - Italy
- ☐ LV - Latvia
- ☐ LT - Lithuania
- ☐ LU - Luxembourg
- ☐ MT - Malta
- ☐ NL - Netherlands
- ☐ [xx] - Other
- ☐ PL - Poland
- ☐ PT - Portugal
- ☐ RO - Romania
- ☐ SK - Slovak Republic
- ☐ SI - Slovenia

- ☐ ES - Spain
- ☐ SE - Sweden

* 6. Activity

- ☒ Transmission System Operator (or association)
- ☐ Distribution System Operator (or association)
- ☐ Other market participant
- ☐ End-user (or association)
- ☐ Energy supplier (or association)
- ☐ Generator (or association)
- ☐ Utility (or association)
- ☐ Civil society organisation
- ☐ Other

Confirmation

☒ I accept that ACER processes my data in line with its data protection rules

2. Consultation questions

To help the Agency understand your concrete and specific input, we recommend that you connect your feedback as much as possible to the recital numbers in the draft Guidelines.

8. Please write here your specific and concrete feedback on the criteria proposed to ensure a timely scenario preparation process (Section 2 of the draft Guidelines).

As a general remark, Terna certainly welcomes the proposal to define criteria ensuring a timely scenario preparation process. At the same time, it should be recognized that a trade-off between delivery time and content quantity exists. Depending on how many scenarios will have to be developed (storylines, target years) and in which level of detail, this will impact the timeline of the process: the higher the former, the longer the latter.

Terna considers the timeframes proposed by ACER for the scenario's development generally feasible, provided that a proper balance between the two above-mentioned expectations is ensured. To achieve such balance, it is important to limit the overall number of scenarios and to focus on target years that are functional to the Ten-Year NDP. From today's perspective, this means that the 2040-2050 horizon would largely have an indicative value. It is certainly necessary to develop a view on this horizon because it helps calibrating the short-term and mid-term horizons so that they are on a trajectory that is coherent with the net-zero targets. Yet, it is not necessary (nor particularly useful, in consideration of the high level of technological uncertainty) to develop the long-term and very long-term horizons with the same level of detail as the short-term and mid-term horizon. In this respect, we would like to highlight that this approach, although mentioned by the Agency itself in its Framework Guidelines at paragraph (38), it is currently not applied by the ENTSOs, which develop a detailed scenario also for the 2050 horizon, i.e. hourly energy and electricity system models are built, despite the inherent uncertainty around future load and generation profiles which will be dominated by technologies for which there is limited empirical evidence today (e.g. electric vehicles, heat pumps, offshore wind, solar with trackers). Therefore, we suggest clarifying in the Framework Guidelines that a detailed scenario for the long-term and very long-term horizon is not expected, because these horizons are not functional to the Ten-Year NDP. Hence, the FG shall enable the ENTSOs to apply simplifications in terms of reduced temporal and spatial resolution for the long-term and very long-term horizons (e.g. annual data at EU member state level).

In addition, Terna would like to highlight that the timeline described in the Section 2 of the Framework Guidelines foresees a too tight timing for the preparation of the Union-wide ten-year network development plans. In fact, based on paragraph (25), the Agency expects the draft TYNDP joint scenarios report to be published and submitted to the Agency, the Member States and the Commission by 31 December of the odd-numbered years (12 months before the infrastructure gaps and the TYNDPs). At the same time, the joint scenarios are subject to the Agency scrutiny and to the European Commission approval, respectively in accordance with articles 12(5) and 12 (6) of the TEN-E Regulation: these two steps require a 6-month period. Therefore, the scenarios will not be approved before 30 June of the even-numbered years in which the Union-wide ten-year network development plans is due, and the ENTSOs will only be left 6 months to prepare the TYNDP after the scenarios are approved.

9. Please write here your specific and concrete feedback on the proposed criteria to ensure robust objective-driven scenario development (Section 3 of the draft Guidelines).

First of all, Terna strongly supports the ACER proposal to develop scenarios through a bottom-up approach, as mentioned in paragraph (34). We indeed fully agree that the key inputs of a scenario should go through a process of consultation and validation at the national level such as the national scenario development process. Such an approach is necessary for developing realistic scenarios, capable of capturing national, regional, or local specificities of our complex and heterogeneous European energy system. All relevant key inputs for any scenario - such as the evolution of energy demand, hourly load & generation profiles, installed RES capacity, installed electrolyser capacity as well as transport capacity - shall be identified through a bottom-up process and then provided to the ENTSOs as an input for the common scenario building process. This would not only ensure a more robust set of assumptions but also a better involvement of national stakeholders, which otherwise might face linguistic barriers to be heard inside bigger EU associations.

Conversely, in top-down scenarios the evolution of the above-mentioned core scenario variables is not an input assumption but the outcome of an algorithm that is searching for a perceived optimum at EU-level. It necessarily represents a perceived optimum because the key input parameters to this algorithm (e.g. location-specific permitting speed, location-specific RES potential, location-specific technology costs, ...) are unknown and have to be estimated, whereby flawed input data produces nonsense output ("garbage in, garbage out" principle). Hence, by their nature, top-down scenarios cannot adequately capture the complexity of national and regional systems nor their local specificities. For this reason, top-down scenarios should only be considered as complementary to bottom-up scenarios.

In addition, as already highlighted in our answer to section 2, we agree that the long-term and very long-term perspective (2040-2050) is inherently subject to great uncertainty. For this reason, we propose to clarify in paragraph (38) that the identification of "an indicative value allowing the definition of trajectories spanning the mid-term, long-term and very long-term" does not imply the development of a detailed scenario, as it happens in the current practice. The Guidelines could clarify that detailed scenarios with hourly time resolution shall only be developed for the short-term and mid-term horizons, which are subject to detailed infrastructure planning (TYNDP), while this level of detail is not necessary for the long-term and very long-term horizon. This provision would avoid that the definition of these horizons becomes an unnecessary obstacle to the timely definition of the other scenarios, while providing very limited added value, in consideration of the uncertainties of these horizons and the fact that they do not serve the scope of TYNDP definition.

Moreover, Terna would like to comment paragraph (39), where the Agency recommends economic growth as the main driver for mid and long-term horizon scenario definition. We agree that it is difficult to understand how the scenario drivers of the current storylines (Global Ambition, Distributed Energy) impact infrastructure requirements. Yet, we believe the identification of the most appropriate drivers should be left to the scenario development and consultation process, to allow flexibility for the selection of the most relevant drivers depending on the specific context and perspective under assessment in each scenario preparation process. Therefore, we highly recommend not to specify in the Framework Guidelines any default driver, based on which scenarios shall be developed, but rather provide a non-exclusive, non-binding list of scenario drivers that impact infrastructure requirements. Apart from the economic growth, this list could also include the energy import dependency rate to distinguish between an energy system where green hydrogen is mainly imported and a case where green hydrogen is largely produced in Europe. The latter case will require large amounts of solar and wind to be deployed in Europe, strongly impacting infrastructure requirements.

10a. Please write here your specific and concrete feedback on the proposed criteria to ensure a transparent, inclusive and streamlined development process, focusing on the stakeholder engagement requirements (Section 4 of the draft Guidelines, recitals (42)-(48)).

In line with recital (34), it must be noted that stakeholders are already providing content-related input at national level. It is therefore questionable for us how the SRG would be able to be more accurate in these interactions than the consultation and validation of inputs obtained at national levels. Instead, the SRG could focus on advising process-related & methodology-related improvements.

10b. Please write here your specific and concrete feedback on the proposed criteria to ensure a transparent, inclusive and streamlined development process, focusing on the information and publication requirements (Section 4 of the draft Guidelines, recitals (49)-(52)).

Terna supports the definition of an open and clear process to involve stakeholders in the scenarios' development, fully in accordance with the principles of the TEN-E Regulation. However, efficient ways of involvement and a proper level of detail of the information to be shared should be considered in the economy and effectiveness of the overall process.

More specifically, with regard to the information the ENTSOs shall make available, listed in paragraph (51), the FGs refer explicitly to the delivery of results on a bidding zone level. We would like to avoid such explicit terms in the FGs. Indeed, the longer the time horizon considered, the less representative the current configuration of bidding zones might be. Therefore, we suggest removing the reference to individual bidding zone from the information listed in paragraph (51).

11. Please write here your specific and concrete feedback on the process for ensuring independent scrutiny of inputs, assumptions and methodologies (Section 5 of the draft Guidelines).

The composition of the SRG shall reflect the stakeholders listed in article 12(3) of the TEN-E Regulation, therefore including "EU DSO entity, associations involved in electricity, gas and hydrogen markets, heating and cooling, carbon capture and storage and carbon capture and utilisation stakeholders, independent aggregators, demand-response operators, organisations involved in energy efficiency solutions, energy consumer associations, civil society representatives". In the light of the different interests represented, it is unclear how to guarantee the capability of the future SRG in providing an effectively independent scrutiny. In consideration of this, we suggest its involvement should be more focused on methodologies and standards to be applied and considered in the scenario development process, rather than on assessing the specific values of the variables that define the scenarios.

12. Please write here your specific and concrete feedback on the proposed quick-review process to enable updating a scenario in case key assumptions change (Section 6 of the draft Guidelines).

The main concern we have with respect to the proposed quick review process is related to the tight timeline foreseen, which would only allow to modify the assumptions through a top-down approach, with the risk of not adequately considering regional and local specificities. In consideration of this, we suggest assessing the possibility to foresee a longer timeline, allowing proper TSOs involvement and visibility on the evolution of the key input parameters.

In addition, in order to improve the predictability of the quick-review process, we suggest to clarify in the Framework Guidelines that the ENTSOs are required to include in the joint scenario report the definition of what a significant event triggering the quick review process means. The ENTSOs should be required to identify the variables and the related observed changes, whose occurrence implies the activation of the quick review process.

13. Please write here your specific and concrete feedback on the proposed compliance reporting (Section 7 of the draft Guidelines).

14. Would you like to share anything else with us regarding the draft Scenarios Guidelines?

Confidentiality

- * 15. Your response would be published on the Agency's public consultation web page. Please confirm that:
- ☒ My response and name of my organisation can be published
 - ☐ My response can be published without my organisation's name (You are asked to give a justification below)
 - ☐ My response contains confidential information; a redacted version may be published (Please ensure you marked the specific text by preceding and closing it with [CONFIDENTIAL]. In addition, you are asked to give a justification below)

Thank you!

Background Documents

Scenarios_Guidelines_DRAFT

Contact

[Contact Form](#)