

# 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

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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

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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

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\* 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

7. Please specify if 'Other'

University / Research Institution

## Confirmation

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

## 2. Consultation questions

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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).

Regarding (10, pt. 1) „inputs, assumptions and models that underpin the scenarios must be disclosed, while safeguarding confidential information”

This should be concretized. Disclosing the model should not mean merely stating which model or tool is used, disclosing an assumption should go beyond merely mentioning it, disclosing data should not be fulfilled by merely providing it on demand.

For meaningful stakeholder engagement, the model should be accessible, the assumptions should be discussed and justified (e.g., by references), and the data should be published in a format that allows for easy replication of the analysis, ideally, it is published under an open license with clear metadata following data standards.

Importantly, the addition of ‘safeguarding confidential information’ as compared to the conceptual draft, merits concretization as to on what grounds information is accepted as confidential. For regulated system operators, there is essentially no commercial confidentiality. Potential security relevance could be judged by an independent, maybe even democratically legitimated body rather than the ENTSOs.

Regarding (10, pt. 3) „ Scenarios must be informative and understandable to decision-makers, stakeholders, and the public and be aligned with the assessments that support decision processes driven by them.”

There seems to be a concern that too many different scenarios dilute the results and impair the ability of policymakers and stakeholders to understand and interpret the results. To deal with this in an analysis with more (as opposed to fewer scenarios), part of the result of the TYNDP should be the discussion if a certain project resp. system need is robust over all (or most of) the different scenarios or not.

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).

Regarding (31) „ENTSOs must detail how specific assumptions are included in the scenarios, covering, amongst other [...] the EE1st principle, [...] the level of demand-side response; [...] and sector integration. Ideally, the guidelines should require that the ENTSOs include (at least from the mid-term) flexibility potentials for which the (regulatory and market) framework may not yet be in place but for which a political consensus has already been reached. For stakeholders and policymakers, it would be very useful to be able to trace the impact of increased energy efficiency and more ambitious deployment of flexibility at least as a scenario.

It is not sufficient that ENTSOs detail how these aspects are included. The scenarios need to provide for the modelling of these aspects according to the current state of the art and allow for the exploration of the effect of EE1st, demand response and sector integration on and their interaction with the grid infrastructure.

Flexibility on the supply and demand side for example can enter the assessment as exogenous assumptions. The state of the art, however, requires that they are partially modelled endogenously and correspondingly the scenarios need to include the parameters required for their modelling instead of endogenous profiles and annual demands.

Furthermore, flexibility, such as the types of electrolysers and their shares in overall supply, the endogenization of individual heat pumps and the grid interactions of electric vehicles, is embedded into several aspects of the storyline. Therefore scenarios, in addition to including these aspects also need to vary them. The assessment of different flexibility levels cannot be replicated via the mere sensitivity to one parameter and thus needs to be represented in dedicated storylines. (It seems that in a top-down scenario-building process ‘economic development’ could much rather be covered by a sensitivity analysis than flexibility.)

Regarding (32) „... drivers (i.e. storylines) for developing scenarios are stable and do not unnecessarily deviate from one TYNDP cycle to the other [while] the most up-to-date assumptions are used.”

It should be noted, that as the modelling for the TYNDP process evolves following the state of the art, it might become necessary to change the type of assumptions in order to keep them up-to-date, notwithstanding a general robustness of the storylines.

Regarding (34) „...broad support in principle exists more for scenarios that are developed through bottom-up processes where the inputs have already gone through a process of consultation and validation at the national level.”

Arguably, broad support also exists for example for the scenarios developed at the European level in the context of PRIMES and POTEnCIA. The guidelines should not anticipate the beneficiary of ‘broad support’ without corresponding analysis or evidence and thereby establish a case for bottom-up scenarios which would not ‘be fully in line with the most recent policy objectives’ as proclaimed by (10).

Regarding (35) „ENTSOs shall extend and amend the assumptions derived from the NECPs to build scenarios that are on target.”

It is critical that any amendment of assumptions is documented and justified.

Regarding (36) „ENTSOs shall ensure a process for independent scrutiny of scenario inputs and assumptions”

The scrutiny should extend beyond the inputs and assumptions, also to the tools used to process them within the scenario building. This concerns for example the extrapolation of historical demand profiles into the future or the inclusion of certain supply and demand options in the dispatch and expansion model within the scenario building.

Regarding (38) „the [...] perspective until 2050 is inherently subject to great uncertainty and would largely have an indicative value”

Given that the lifetime of grid infrastructure is significantly longer than 15 years, the so-called ‘very long-term perspective’ is necessary for an assessment of the investments within the TYNDP. If the scenarios do not extend beyond 15 years, they need to include assumptions on the residual values or expected yearly returns for categories of investments after the analysis period, to prevent that the dispatch and expansion step of the scenario building includes capacities doomed to strand.

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)).

Regarding (43) „ENTSOs shall create a Stakeholder Reference Group ('SRG'), comprised of (at least) the key stakeholders”

Establishing a Scenarios Reference Group seems like a promising step in reducing bias in the scenarios. In addition to the described aspects, stakeholders should have access to a budget to cover their engagement in the process. Otherwise, some societal and academic stakeholders might not be able to contribute adequately.

In addition, all inputs that originate from potentially biased stakeholders (and would therefore be discussed by the SRG) should be published ahead of the discussion to enable (or even invite) input from other stakeholders that do not already form part of the SRG.

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)).

Regarding (50) „ENTSOs shall adopt academic standards for the presentation of inputs, assumptions, models and final scenarios, in terms of consistency of units and having a list of the sources for the different inputs”

This should be extended to the discussion and justification of assumptions and to the versioning of the documents related to the TYNDP process. Meaning disclosure and justification of sources for data, of the rationale for assumptions, and of the choices of model(ing approaches) over alternatives. Furthermore, this should include the documentation of the process and traceability (and referenceability) of different versions of a document within the process, as well as basic information such as definitions and units with all data provided. With regard to data, this should be done following the FAIR data principles. Regarding (53) „The time available to the SRG to discuss and reach a majority view”

The working mode of the SRG is not mentioned until here. If the group is to develop a majority view, it seems paramount to clarify its constitution further. Article 12 only mentions the DSO entity and hydrogen stakeholders. It is to be expected that commercial stakeholders will outnumber societal stakeholders in such a group, which would result in a biased majority view.

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).

Regarding (55) „In case the SRG cannot reach a significant majority view, the ENTSOs are encouraged to seek further independent advice from energy and climate scientists and independent experts.”

The ENTSOs should be encouraged to do this in any case and not just in case of conflicts within the SRG.

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).

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?

General comments and suggestions:

- The outcome of the stakeholder process might go beyond just inputs for the modelling of system needs. Some possible storylines or sensitivities, such as flexibility innovations might have implications beyond the actual scenarios. In such cases, there should be a mechanism or procedure to conclude from the stakeholder process in the scenario step, that alterations in the modelling or CBA steps might be necessary to truly explore the impact of a relevant storyline.
  
- The guidelines could include more specific aspects, for example regarding
  - o avoiding the use of historical information for demand profiles, if they are not representative of future demands altered due to the energy transition
  - o diversifying the climate years considered in the process
  - o regularly benchmarking models and tools to other available (and potentially open-source) alternatives

And, since your form allows for only 5000 characters per section, here the remainder of our feedback to section 3:

Regarding (39) „ENTSOs can, besides economic growth, propose additional drivers around which scenarios could be developed”

The number of variants should not be limited as per footnote 18. Scenarios need to reflect the uncertainty in the general development of the system and its framework. Given the complexity and uncertainty associated with the energy transition and the current geopolitical situation, it is quite unlikely that only three scenarios capture the relevant developments within the next decade. A relevant scenario space should include more rather than fewer storylines and distinguishably cover aspects such as heavy electrification, heavy hydrogen use, and (technical and organizational) flexibility innovations. As argued above the level of flexibility in the system should be reflected in an additional storyline in order to enable the assessment of EE1st in line with the TEN-E. Importantly a scenario ideally serves to understand the impact of these aspects one by one.

Thus, grouping them all together in only two scenarios does not do the trick. At the same time, the relevant storylines affect a larger set of parameters entering the analysis and would therefore not be covered adequately by the sensitivity and robustness considerations of individual inputs and outputs.

There seems to be a concern that too many different scenarios dilute the results and impair the ability of policymakers and stakeholders to understand and interpret the results. To deal with this in an analysis with more (as opposed to fewer scenarios), part of the result of the TYNDP should be the discussion if a certain project resp. system need is robust over all (or most of) the different scenarios or not.

There seems to be a further concern that too many different scenarios exceed the capacity of the ENTSOs and slow down the process. Assuming that all scenarios are computed within the same modelling framework merely modifying the set of inputs fed into the model, it seems that computation time of several hours (or even days) within a two-year process would not prevent the analysis of five or six scenarios. As far as such a level of automation is not in place yet, ENTSOs should strive to achieve it in the future. For the stakeholder process within scenario building on the other hand a larger number of storylines might actually streamline the discussion as more varied stakes would be reflected in a broader range of scenarios.

Lastly, stakeholders should also be empowered to propose additional drivers for new storylines.

Regarding (41) „The Agency emphasises that a further sensitivity analysis, which would best fit the process of cost-benefit assessment, could provide even more insights to the decision-makers. [...] Such sensitivity

analysis may be particularly suited to deal with near-term uncertainties”

Sensitivity analysis should not be limited to the cost-benefit assessment. In order to contribute effectively to the TYNDP process, stakeholders need to be able to understand how the critical inputs into the scenario building affect the scenario outcomes and subsequently the cost-benefit assessment.

Furthermore, sensitivity analysis also benefits the analysis of the mid and long-term.

In addition, this should be amended by a robustness check for central results. The robustness of central results is not necessarily covered by the sensitivity analysis as for a very critical result, even a relatively small sensitivity would be relevant for policymakers and stakeholders to understand.

## Confidentiality

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- \* 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](#)