



EASE Reply to the European Commission's Public Consultation on the European Grids Package

July 2025



INTRODUCTION

The European Commission's Public Consultation on the European Grids Package seeks feedback on the current implementation and impact of the EU regulatory framework for grids, including the permitting frameworks for grids, renewable energy generation and storage, and explore the need for action and possible solutions. The aim of this consultation is to collect in-depth and high-quality evidence, information, data and feedback on how the TEN-E Regulation and other relevant legal provisions have performed. It also aims to determine whether additional EU action is needed to achieve its objectives concerning the European electricity grid.



EU Survey Public Consultation Questionnaire

EASE note: Some questions outside EASE scope (such as CO2 infrastructure) are not listed.

General Questions

Secure supplies of clean and affordable energy are critical for European competitiveness, preparedness, security and the EU's decarbonisation efforts towards 2030 and 2050. Ensuring a well-integrated and optimised European energy grid is crucial to accelerating a cost-efficient clean energy transition. The mission letter to Commissioner Jørgensen calls to work for the production of "more clean energy" and "the upgrade of the grid infrastructure". Specifically, it is requested to "look at the legal framework on European grids with the aim to help upgrade and expand grids to support rapid electrification [and] speed up permitting" and highlights the need to "upgrade our grid infrastructure and develop a resilient, interconnected and secure energy system".

Q1: To what extent do you agree that existing EU legal framework for grids delivers on the following objectives?

| Objective | Strongly disagree | Slightly disagree | Neutral | Slightly agree | Agree | Don't know |
|---|--------------------------|--------------------------|--------------------------|--------------------------|-------|--------------------------|
| Market integration | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> |
| Interconnections | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> |
| Competition/ Affordability of energy prices | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> |
| Energy security | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> |

Please explain your reply providing, where possible, qualitative and quantitative evidence:

Although wholesale market integration has advanced across the EU, the TSOs now procure flexibility services through joint balancing service procuring platforms (Mari, Picasso, Terre, ...) with key and harmonised balancing products. This results from a deliberate direction taken by the EU, referred to as the "Internal Electricity Market": it consists in integrating the development,



operation, and commercial access to the (high) voltage transmission systems, operated by TSOs. TSOs – and other actors such as power exchanges and DSOs – are required to cooperate under the Electricity Regulation and the EU Network Codes and Guidelines, e.g. by the setting up of the Single Day Ahead and the Intraday Market Coupling. As a result, traders of electricity across Europe have now access to a single European marketplace, through market coupling.

However, within the achieved results of the EU's market integration, Distributed Energy Resources and services do not yet have a Single Market. Thus, the market integration remains fragmented, with limited storage deployment and non-discriminatory access to markets. Affordability is impacted by under-utilisation of flexibility that could alleviate grid investment needs and defer unnecessary grid investment.

Concerning the TEN-E regulation, it focuses heavily on cross-border projects, but projects related internal bottlenecks within Member States are often critical for market integration. These are rarely adequately eligible for PCI status or funding, creating a mismatch between planning and physical needs.

Q2: In your view, what are the main barriers to grid infrastructure development necessary for the energy transition to happen, and at sufficient pace? Please rank from 1 (most important) to 8 (least important):

| Barrier | Rank (1-8 or <input type="checkbox"/> Don't know) |
|--|---|
| Suboptimal transmission network planning | 7 |
| Suboptimal distribution network planning | 4 |
| Lengthy permitting | 1 |
| Insufficient financing | 6 |
| Insufficient supply chains | 8 |
| Inefficient use of existing infrastructure | 5 |
| Regulatory uncertainty | 3 |
| Other (please specify) | 2: CAPEX-OPEX assessments. |



Please explain your reply providing, where possible, qualitative and quantitative evidence:

Grids need to expand significantly to modernise and accommodate the overall demand growth, since electrification needs to accelerate in order to support decarbonisation, while also allowing to integrate the new resources (distributed renewables, electric vehicle charging infrastructure) in a cost-efficient and digitalised way.

In this context, MSs need to fully implement Directive 2019/944 regarding Distribution Network Development Plans with a 5–10-years horizon, and adapt regulatory frameworks to incorporate anticipatory investments. Improper planning can lead to missed opportunities in terms of industrial grid connection which are, de facto, missed opportunities in terms of reindustrialisation of the EU. Further TSO–DSO planning, coordination and transparency is important in this infrastructure development process.

Concerning permitting, one of the largest barriers to deployment of grid-forming and clean energy resources, like storage, is siting and permitting delays. Enacting reforms to streamline these processes will result in projects connecting to the grid more quickly and expediting grid expansion and grid reliability. For example, in Italy, lithium-ion battery projects benefit from a fast-track permitting process that can take projects from concept to ready-to-build in just a few months. This approach has proven highly effective, enabling over 2.1 GW of new lithium-ion capacity to move forward in 2024 alone. It demonstrates how streamlined regulation can accelerate the deployment of strategic energy infrastructure. However, this regulatory advantage has also created an unlevel playing field. Other technologies—such as Long-Duration Energy Storage (LDES)—must navigate longer, more complex permitting procedures, despite posing no safety or environmental risks. To accelerate the deployment of diverse and complementary storage solutions, without creating this unlevel playing field, EASE recommends that technology agnostic fast-tracks be established for grid-firming resources like storage. Doing so would both speed up the energy transition and restore balance in how storage technologies compete in the market.

Concerning CAPEX–OPEX assessments, it is important to ensure cost-efficient and timely grid development, TSOs should be required to conduct full CAPEX–OPEX comparative assessments in line with the Electricity Market Design, when evaluating grid investments. This would help avoid structural bias in favour of traditional, capital-intensive grid reinforcements—often costly, mono-functional, and with long lead times—while enabling fair consideration of flexible, multi-use solutions such as Battery Energy Storage Systems (BESS). BESS can provide a wide range of services, including load shifting, peak shaving, voltage regulation, synthetic inertia (grid-forming), and black-start capability. These assets are highly modular, scalable, and can typically be deployed within 12–24 months.



The lack of proper regulatory incentives for non-wire alternatives (like storage and flexibility) and the misalignment of planning processes across transmission and distribution levels remain critical obstacles. Energy storage is often excluded or poorly accounted for in network development plans, and DSOs lack the tools and capacity to incorporate flexibility in a structured way.

Regulatory uncertainty remains a key barrier, particularly concerning the role and treatment of energy storage and flexibility in grid planning and operation. Inconsistent implementation of EU directives at national level, unclear eligibility rules for participation in flexibility markets, and diverging permitting rules create significant risk for investors and developers. Without clear, stable, and long-term regulatory frameworks, innovative solutions like storage struggle to gain traction as reliable, bankable alternatives to grid expansion.

Up to date, regulation around grids had the aim to constrain system operators (SOs) from overbuilding, as their business model compensates for capital expenditures. In recent years, the needs for infrastructure development and investment have radically shifted. Today, there is a huge demand for grid updates (that the energy transition and Green Deal objectives depend on), investment in new assets and in more efficient and digitalised operation with adequate system services. SOs do not have to fulfil this capacity demand. Therefore, there is a need to advance these developments as rapid and as efficiently as possible to meet the demand and generation connection needs.

As such, the regulatory framework should reflect this shift, and the EU can lead the effort for Member States to carry out this adaptation following an EU guidance. A more binding, EU-level approach to grid development, with stronger enforcement, clearer cross-border planning mandates, and more robust incentives is needed.

Financing challenges also hinder the timely development of grid infrastructure, especially in the context of unprecedented future grid investment needs. While public funding mechanisms exist, access remains complex and uneven. Flexibility solutions like energy storage are often left out of investment planning and cost-recovery mechanisms, despite offering efficient alternatives. A review of tariff structures and financing models is needed to support grid-enhancing technologies and flexibility solutions. Concerning grid tariffs for energy storage, EASE published a position paper in June 2025: <https://ease-storage.eu/publication/grid-fees-and-network-tariffs/>

Insufficient supply chains: Challenges in the supply chain hinder the development of transmission infrastructure. The global demand for new transmission lines is increasing, placing



significant pressure on the availability of cables, materials, and critical components required for grid expansion.¹

EU Infrastructure Planning

Requirements for planning of transmission network development on a national and European level are included in the internal market legislation (for electricity as well as hydrogen and decarbonised gases) and the TEN- E Regulation. They require the TSOs to put forward network development plans with at least a 10-year outlook for grid development biannually. At the European level, this is done through the Ten-year network development plan (TYNDP), currently developed by ENTSO-E and ENTSO-G.

The following questions Q3 to Q6 apply to both electricity and hydrogen, please specify the sector you are referring to when answering these questions:

- Electricity

Q3: To what extent do you agree with the following statements?

| Statement | Strongly disagree | Slightly disagree | Neutral | Slightly agree | Strongly agree | Don't know |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| The current framework in relation to the TYNDP and national transmission development plans provides for integrated and coherent planning at national and EU level | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> |
| The TYNDP identifies all cross-border infrastructure needs | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The TYNDP identifies all relevant projects to match | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

² <https://publications.jrc.ec.europa.eu/repository/handle/JRC137685>



| | | | | | | |
|--|--------------------------|---|--------------------------|--------------------------|--------------------------|--------------------------|
| the actual infrastructure gaps | | | | | | |
| The TYNDP should have a more top-down European approach to identify cross-border infrastructure needs | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The TYNDP should have a more top-down European approach to better link identified needs and priority projects of European interest | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Projects at national level should align and support priorities of European interest | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Please explain your reply providing, where possible, qualitative and quantitative evidence:

The current TYNDP process has improved in transparency but lacks sufficient integration of decentralised and distributed resources, including storage. A stronger top-down European approach is needed to complement the bottom-up approach based on project submission and to ensure alignment with EU decarbonisation and electrification goals. National plans too often reflect conservative assumptions, failing to reflect the pace and scale of flexibility needs, including congestion management needs.² There's furthermore an absence of plans for DSOs (DNNDP) of the build-up of the TYNDP (including scenarios).

In addition, the ability for the current framework to provide for an integrated planning at the national level is impacted by the fact that the TYNDP is non-binding and national plans are not required to adapt their NECPs in response to the TYNDP, limiting the impact of the TYNDPs on NDPs.

² <https://publications.jrc.ec.europa.eu/repository/handle/JRC137685>



Q4: The needs identification at EU level should (you can choose more than one option):

- ☒ Cover cross-border projects within the EU
- ☒ Cover internal reinforcements in Member States necessary for cross-border projects
- ☒ Cover connections with third countries
- ☒ Cover non-infrastructure solutions (e.g. grid enhancing technologies)
- ☒ Follow a cross-sectoral approach
- ☒ Other (please specify): _____

The needs identification process must explicitly include non-infrastructure solutions like grid-enhancing technologies, digitalisation, and flexibility options such as storage. This would better align infrastructure planning with cost-efficient system operation and support the Energy Efficiency First principle. The needs identification should furthermore force TSOs to perform Grid Cost-Benefit Analysis, including OPEX and CAPEX.

Q5: Do you agree with the following statement? *The frequency of the identification of system needs process (every 2-years) is fit for purpose.*

☒ Yes ☐ No

If no, the frequency should be changed as follows:

- ☐ Yearly, in a more simplified form
- ☐ Every 3 years
- ☐ Less frequently
- ☐ Instead of regular updates, updates when required by major policy changes and developments
- ☐ No opinion

Q6: Do you agree with the following statement? *The frequency of the scenarios building process (every 2-years) is fit for purpose.*

☒ Yes ☐ No

If no, the frequency should be changed as follows:



- ☐ Yearly, in a more simplified form
- ☐ Every 3 years
- ☐ Less frequently
- ☐ Instead of regular updates, updates when required by major policy changes and developments
- ☐ No opinion

Please explain your reply providing, where possible, qualitative and quantitative evidence:

In order to improve the scenarios, it could be beneficial to also include riskier hypotheses, for example situations where Net Zero targets are not achieved. There are important policy shifts and other strategic decisions that can impact scenarios. For this reason, flexible review triggers should be implemented, for example for major policy or market shifts. A “living data layer” can be applied in the scenario-building process that incorporates key annual updates to key drivers like RES costs, demand growth and BESS costs. This in turn could then be compared with other competitive markets, like those in Asia.

Q7: Do you agree with the following statement? *The governance framework of the TYNDP, i.e. the role of all individual involved, should be revised.*

X Yes ☐ No

If yes, please explain:

The TYNDP governance should ensure meaningful participation of storage stakeholders, DSOs, and flexibility service providers. The process is currently dominated by TSOs, leading to underrepresentation of decentralised flexibility and slower uptake of innovative solutions.

Electricity Network Planning at National Level

At a national level, transmission and distribution grid operators are obliged to establish respective network development plans (“NDP”) at least on a biannual basis, pursuant to requirements of Articles 51 and 32 of the Directive (EU) 2019/944. Plans should set out planned investment, taking into account future development of supply and demand, including renewables generation, flexibility and electric vehicles (EVs) recharging points.



Q9: Concerning the national transmission and distribution network development plans, do you agree with the following statements?

| Statement | Yes | No |
|---|-------------------------------------|-------------------------------------|
| The existing legal framework for transmission network development plans is fit for purpose | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| There is a sufficient alignment between national transmission development plans between Member States | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| There is a need for better alignment between national transmission and distribution network development plans across the EU | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

If for the last question yes, please choose among the following elements those that can be improved:

☒ Common scenarios

☐ Alignment of frequency of the planning

☒ Alignment of planning scope and outlook period

☐ Common minimum features for transmission and distribution network development plans

☐ Other

Q10: Concerning the distribution network development plans, to what extent do you agree with the following statements?

| Statement | Strongly disagree | Slightly disagree | Neutral | Slightly agree | Strongly agree | Don't know |
|--|--------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| The existing legal framework for distribution network development plans is fit for purpose | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The coverage of small distribution system operators (DSOs) in the network | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



| | | | | | | |
|---|--------------------------|--------------------------|---|--------------------------|--------------------------|--------------------------|
| planning is sufficient under the existing legal framework | | | | | | |
| There is sufficient transparency of distribution network development plans | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The implementation of the distribution network development plans is sufficient and their objectives met | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Distribution grid operators are equipped with sufficient capacity to properly plan distribution grids | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| There should be a stronger coordination of distribution network planning at EU level | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Other:

The Distribution Network Development Plans – DNDPs, as proposed by the Electricity Directive (UE) 2019/944, represent a transparent and collaborative process, with an investment horizon of 5–10 years, requiring the participation of stakeholders, coordination among system operators (especially in the elaboration of the Ten Years Development Plan – TYNDP) with monitoring by national authorities. In this respect, anticipating future investments is an essential exercise to adequately address the needs of the different sectors (renewables, electromobility, heating and cooling, data centres among other sectors). Further legislation concerning anticipatory investments should be clear that it includes for example the oversizing when a solution anticipates future investment needs in decarbonisation/RE acceleration zones. Validation procedures should include the comparison of the societal impact of under-utilisation vs the risk of late arrival of the capacity with CBAs. It should consider the impacts on the electricity prices derived from a further integration of RES and a reduction of RES curtailment and congestion management service activations. Small DSOs, in particular, lack resources to engage in forward-looking flexibility planning. It is important that all countries in the EU can implement DNDPs as defined in the Electricity Directive, enabling an assessment of medium to



long-term network investments, ensuring the participation of stakeholders and the cooperation among system operators, which conveys the suppression of caps/limitation on investment in grids, as established in Spain (based on a percentage of GDP). For that reason, the European Commission should monitor the transposition of DNDP process across MSs and require its urgent implementation.

Moreover, as electrification is widely recognised as one of the most cost-effective and scalable pathways to achieving net-zero objectives—and its potential is further enhanced by the integration of energy storage solutions (e.g. electricity and thermal storage)—distribution system operators (DSOs) should prioritise electrification in their planning and operations. This includes adopting connection practices that favour and accelerate the integration of electrification-related assets.

Transparency on Electricity Grid Hosting Capacity

Article 31(3) of Directive 2019/944 (EU) requires that distribution grid operators provide system users with the information they need for efficient access to, and use of, the system, in particular on capacity available for new connections in their area of operation, information on connection requests as well as on how the available grid hosting capacity is calculated. The EU Action Plan for Grids further strives to enhance transparency by creating a common understanding on the grid hosting capacity calculation across Europe.

Q11: Do you consider additional measures necessary to reduce grid connection lead times? Should there be differentiated approaches for different types of uses (industry decarbonisation, residential heat, charging infrastructure)?

☒ Yes ☐ No ☐ Don't know

If yes, please explain your reply providing, where possible, qualitative and quantitative evidence.

To enable faster and more efficient grid connection of projects that support EU decarbonisation and system optimisation, the EU should move away from the outdated “first-come, first-served” approach. Instead, a “first-ready, first-served” model should be adopted—prioritising projects based on clearly defined development milestones (e.g. permitting, land rights, financial closing), while allowing flexibility for projects impacted by Force Majeure.

This approach would unlock stalled or speculative “ghost” projects that currently block grid capacity, encourage more mature applications, and improve overall queue management. Viable



projects would benefit from faster processing, while underperforming or inactive projects could be deprioritised or removed.

Additional measures should include:

- Granting public interest status to grid development projects, beyond renewable generation alone and including energy storage technologies.
- Allowing positive silence to accelerate administrative decisions where appropriate.
- Mandating regularly updated, transparent capacity maps showing available grid capacity and planned reinforcements.
- Requiring TSOs to publish key performance data on grid connection queues, capacity, and investment progress.
- Adapting queue processes by asset type, considering their different system impacts and urgency.

The UK provides a practice example: queue reforms now prioritise projects with land and planning rights and protect those with strategic significance, such as those relieving congestion or deferring grid investments. These projects retain queue positions if they meet agreed development milestones. Projects with government contracts are protected to ensure investor certainty. Timelines are transparent from the outset, balancing reform with predictability.

Furthermore, a scoring-based system could prioritise grid connections delivering behaviours that's needed for the system operator and the electricity grid (e.g. delivery of flexibility, inertia or voltage control).

The integration of these proposals would ensure that Member States' connection queue reforms unlock cost-effective, grid-friendly flexibility solutions like energy storage and demand-side assets—ultimately accelerating the energy transition and optimising infrastructure use.

Permitting

Directive (EU) 2023/2413 (Renewable Energy Directive – RED III), Directive (EU) 2024/1788 (Directive on Gas and Hydrogen Markets), Regulation (EU) 2022/869 (TEN-E Regulation), and Regulation (EU) 2024/1735 (Net-Zero Industry Act) establish provisions for the acceleration of permitting procedures for renewable energy generation, storage and energy networks including CO₂ assets. Whilst some RED III provisions have yet to be transposed by Member States due to upcoming deadlines, permitting procedures are perceived as one of the main cause of delays in project implementation.



Q12: In order to accelerate permitting for energy networks, storage and renewables and CO2 assets, to what extent do you agree with the following statements?

| Statement | Strongly disagree | Slightly disagree | Neutral | Slightly agree | Strongly agree | Don't know |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| The permitting provisions of the TEN-E regulation are clear and easy to implement | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Permitting procedures should be fully digitalised | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> |
| Availability and sharing of environmental and geological data (and other technical data required) should be ensured | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> |
| One-stop shops for network permitting should be introduced | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> |
| Environmental assessments should be simplified and streamlined* | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> |
| Legal deadlines for permitting procedures need to be shortened | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> |
| Deadlines for the permitting of networks should be shortened or established where missing | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> |
| Deadlines for the permitting of Projects of Common Interest and Project of Mutual Interest should be shortened and clarified | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> |



| | | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| The permitting procedures for storage should be simplified | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> |
| The permitting procedures for distribution network projects and small-scale renewable projects, as well as repurposing, refurbishment and repowering should be simplified | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> |
| The permitting procedures for hybrid projects and other innovative solutions should be simplified | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> |

Other:

(*) Please specify:

Please explain your reply providing, where possible, qualitative and quantitative evidence:

EASE has consistently advocated for storage to be treated as a key enabler of system flexibility, warranting streamlined and digitalised permitting. While RED III introduces provisions for storage permitting, implementation is uneven. Guidance and enforcement mechanisms are needed to ensure timely rollout across Member States.

The development of distribution grids should be always classified as of overriding public interest. The reason is that most of renewable development (fundamentally solar) is connected at distribution networks, which implies that the public interest in building distribution grids is no lesser than the construction of renewables.

Other measures to consider are:

- As for renewables, digitalised one-stop-shop procedures for permitting grid infrastructure projects would benefit and accelerate the process.
- Implement monitoring and enforcement mechanisms to comply with permitting deadlines at national and EU level accelerate grid permitting, track and report



compliance with deadlines. The EU should require regular reporting by Member States on permitting progress.

- Provide with enough resources and personnel for authorities to manage the growing number of connection requests.
- Permitting procedures are largely managed at the regional level, often leading to significant regional disparities in timelines, interpretation of national rules and administrative requirements, creating fragmentation and unpredictability for project developers. To address this problem, the EU could implement more coordinated models and the harmonisation of administrative procedures, including common application formats and shared digital platforms.

Regarding hybrids: Despite the significant value that hybrid power plants (typically combining wind and solar PV generation and/or storage) can bring to the energy system, there is still no comprehensive regulatory framework at EU level to support their deployment. Regulatory gaps and inconsistencies across Member States (MS) are slowing down the rollout of such projects in particular:

- Only a few countries have introduced comprehensive regulation for the hybridisation of two generation technologies. Notably, Spain, Portugal and Poland have made significant progress. However, in most EU countries developers still face legal uncertainty around: (i) how to modify existing permits or obtain new ones, (ii) how to update grid connection permits or (iii) how dispatch or metering should be handled for hybrid plants.
- The absence of clear definitions at EU level for what constitutes a hybrid plant is another complication as EU national regulators use different definitions.

Facilitating Investments in Grid Infrastructure

Article 16 of the TEN-E Regulation facilitates investments with cross-border impact through a cross-border cost allocation (CBCA) framework where the relevant national regulatory authorities (NRAs) jointly agree on CBCA decision. Where there is no agreement among the NRAs, they may jointly request ACER to decide on the investment request including the CBCA.



Q13: To what extent do you agree with the following statements?

| Statement | Strongly disagree | Slightly disagree | Neutral | Slightly agree | Strongly agree | Don't know |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| The current cross-border cost allocation (CBCA) framework is fit for purpose | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> |
| An investment request within the CBCA framework could also cover several projects ('bundling') to facilitate cost sharing amongst more Member States beneficiaries | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> |
| The CBCA framework should be developed further to facilitate that investment costs are shared amongst countries, beyond hosting Member States, in proportion to the expected benefits | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The role of involved actors (Member States, NRAs, ACER, TSOs) should be revised to facilitate the process* | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Other: _____

(*) For the last question, please specify:

Concerning the stakeholder involvement, they should allow for Flexibility in CBCA Agreements, more concretely: allow for agreements that go beyond strict compensation of net negative impacts. ACER will need to be more proactive role in guiding CBCA processes, issuing early



opinions, and facilitating consensus. TSOs need to collaborate more closely across borders; improve data sharing and joint planning of bundled projects.

Please explain your reply providing, where possible, qualitative and quantitative evidence:

Q14: To what extent other instruments or tools (beyond CBCA) should be considered or modified to facilitate financing of cross-border infrastructure?

| Statement | Strongly disagree | Slightly disagree | Neutral | Slightly agree | Strongly agree | Don't know |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Inter-Transmission System Operator Compensation (ITC) mechanism | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> |
| Sharing of congestion income | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> |
| Common/regional regulated asset base (RAB) | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Ex post conditionalities | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |

Other: Network developments are closely linked to the choices of their electricity mix made by Member States. Considering these different energy mixes among Member States, harmonising grid tariff at EU level is not relevant. Besides, ACER already investigated a few years ago the opportunity to develop a network code on electricity network tariff and had concluded it was irrelevant. As a consequence, EASE is opposed to a common or regional Regulated Asset Base.

Funding the necessary grid reinforcements and adaptations will require mobilisation of significant financial resources. Grid operators, both at the transmission and distribution levels, are faced with an unprecedented increase in the volume of capital expenditure possibly affecting credit rating and access to capital.



Q15: In your view, which financial obstacles are most relevant for investments in infrastructure projects?

| Objective | Strongly disagree | Slightly disagree | Neutral | Slightly agree | Strongly Agree | Don't know |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Access to debt | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> |
| Access to equity | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Access to counter-guarantees | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Regulatory risk | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> |
| Access to public funding (EU/national) | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Other:

For a DSO to have an efficient access to financial markets, it is crucial that this framework is predictable, supportive and provides stability for long-term investments. This is key for easy and cheap debt/bond funding and afford equity investment in good position.

The access to direct public funding could be a facilitator for certain actions, but not became a central element in most cases. The direct funding of network investment through public resources has in most EU regulatory frameworks the consequence of excluding them from the inclusion into the RAB. That means, these investments, in hands of DSOs, cannot generate returns to remunerate their management and for their cost recovery.

The role to play by public funding could be oriented according to different paths:

- to support on the costs of electrification of residential customers, services, and industries. This contributes to increasing the electricity demand and reduces increasing network costs among larger consumption.
- to postpone the effect on consumer charges of increasing investments until the expected growing energy demand becomes effective, while unaffected the inclusion in the RAB of additional investment. If considered necessary, by the NRA, public funding may be assigned to a “special fund” to “smooth” the pattern of network costs to consumers, leveraging on future demand growth that will allow full recovery of all



costs through grid tariffs. This action could be complementary to other, such as non-linear depreciation profiles.

- to supply loans in special low-cost conditions, or provide derisking tools to finance investment, if required by certain DSOs (of small-medium size, or in need to afford disproportionate projects for their size).

Furthermore, the existence of structural/legal caps and limitations to DSO investment are by far, the toughest barriers found by utilities to service customers and contribute to energy transition. Provisions in legislation should tackle such limitations, as far as costs and investments are prudently undertaken and supervised by NRAs.

Financing instruments such as InvestEU, the Innovation Fund, and the Modernisation Fund should prioritise flexibility-enabling infrastructure, including storage and hybrid projects.

Q16: If needed, what financial measures could be considered to further support transmission infrastructure? Please specify.

To meet the investment needs for transmission infrastructure without excessively burdening end-users through grid tariffs, a range of financial measures should be considered:

- Diversify funding sources to decouple grid investments from escalating grid tariffs. This includes:
 1. Public funding from the respective national budgets and/or with loans for relevant projects at lower interest rates from EIB or similar EU banking institutions,
 2. Blended finance (e.g. combining EU low-interest loans with private loans to de-risk projects),
 3. Private sector investment, including allowing developers to co-invest in grid assets needed to connect their generation or demand projects, with appropriate compensation mechanisms.
- Government-backed guarantees, via national or EU development banks, should be expanded for key infrastructure projects (e.g. substations, offshore grid connections).
- Green or Infrastructure Bonds issued by EU institutions or regional entities can mobilise private capital, especially when backed by public guarantees.
- Introduce targeted financial incentives (e.g. enhanced remuneration or premiums) for grid projects enabling key decarbonisation objectives—such as offshore wind



integration—where specific risks (e.g. maritime conditions) must be reflected in the investment framework.

- Formalise and streamline cross-border cost allocation methodologies, to reduce regulatory delays and political friction in transnational transmission projects.
- Finally, electrification—a key pillar of decarbonisation—must be financially prioritised, including through investment incentives for grid upgrades that enable greater electrification of end uses.

Q17: If needed, what financial measures could be considered to further support distribution infrastructure? Please specify

Tariff design reforms should enable DSOs to invest in digitalisation, storage integration, and grid-enhancing technologies:

- DSOs can benefit from the same measures as TSOs.
- There should also be targeted funds for low and medium voltage upgrades.
- The role of the DSO is shifting. With increasing decentralised generation and load, DSOs need to implement more network management than before. As their role shifts from a ‘connect and forget’ model to needing to have a more active role, the investment challenge rises, as it is not only a capacity challenge that they face, but also the operational costs are increasing.
- For this reason, DSO financing should also encourage solutions that increase observability, granularity and optimises for grid connections.
- Adapt cost-sharing models so that first movers aren't penalised when reinforcing infrastructure that will benefit many future users (e.g. EV hubs, data centres, business parks).

Supply Chains

Constrained supply chains and a lack of skilled workforce are being cited the major hurdles hindering grid development. The 2023 Action Plan for Grids included concrete action to address the often fragmented technical requirements for grid components through a common specifications workstream, as well as the need for greater visibility on future investments planned. The Union of Skills package adopted on 5 March 2025 targets the identified gap in skills – particularly those needed for the energy transition, investing in people for competitiveness, reinforcing the Competitiveness Compass and the Clean Industrial Deal.



Q20: To what extent do you agree with the following statements?

| Objective | Strongly disagree | Slightly disagree | Neutral | Slightly agree | Agree | Don't know |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| The current network development plans at EU and national level provide sufficient visibility for the supply chain for the purpose of investment planning | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| There is a need for better visibility to ensure sufficient investment in the supply chains | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> |

If for the last question slightly agree or agree, please specify:

EU grid governance currently follows a top-down approach of the electricity grid infrastructure debate, by focusing almost exclusively on reinforcing the (high voltage) transmission systems and cross-border electricity infrastructures (interconnections between Member States, off-shore wind infrastructures, etc.).

Q21: To what extent do you agree with the following statements?

| Objective | Strongly disagree | Slightly disagree | Neutral | Slightly agree | Agree | Don't know |
|--|--------------------------|--------------------------|---------|--------------------------|--------------------------|--------------------------|
| There is a need for further harmonisation of equipment requirements within the EU, for the purpose of scaling up supply chains and their repair capacities | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Other: According to certain EASE members, harmonisation of equipment in general has already solid bases with the existing grid connection network codes. It can bring benefits through relevant economies of scale but beyond a certain level, harmonisation brings more costs than benefits and therefore requires cautious approaches. Not everything needs to be harmonised



to be interoperable. It can especially be costly when considering retroactive application to existing equipments or retrofits.

According to other EASE members however, on the more specific topic of connection requirements in the RfG NC, they are only loosely harmonised (too generic), and insufficient for all flexibility device manufacturers (rooftop solar, household storage, ...).

- Harmonising provisions need to be more prescriptive, by defining closed or limited options by parameter/requirement, instead very general rules or open-ended derogations.
- This is particularly acute for distributed devices like household storage e.g., qualifying as Type A Generators under the RfG NC, and connected to the lower voltage systems. These devices are mass produced and deployed in thousands of units. This large-scale deployment requires standard certifications, to prove to DSOs that they meet predefined safety and performance criteria (electromagnetic requirements, ...) on a large-scale basis (and not unit-by-unit).

As a result of these generic provisions:

- When seeking certification before connection, these flexibility devices need to certify against the CEN-CENELEC standard EN 50491-1 (for low voltage), loosely codifying the RfG NC.
- The standard EN 50491-1 is also generic: it allows for deviations from one Member State to the other, as in the RfG NC.
- Once certification is obtained in one Member State, with very few exceptions, full product recertification remains required for entering another Member State, and connecting to the grid.

According to certain EASE members, the resulting fragmentation of the European market should be addressed by a more prescriptive harmonisation through RfG NC, while also avoiding retroactive effects that could lead to costly retrofits for existing equipment (which would contribute to erode regulatory investment security).

Q22: Is there a need for additional EU action to address supply chain bottlenecks in the energy sector, following recent initiatives?

☐ Strongly disagree

☐ Slightly disagree



- ☐ Neutral
- X Slightly agree
- ☐ Strongly agree
- ☐ Don't know

Q23: Is there a need for additional EU action in the field of skills for the energy sector, following recent initiatives, such as the Union of Skills?

- ☐ Strongly disagree
- ☐ Slightly disagree
- ☐ Neutral
- X Slightly agree
- ☐ Strongly agree
- ☐ Don't know

Digitalisation and Resilience

Digitalised and resilient grids are essential from a security of supply perspective. Actions were put forward also as part of the Action Plan for Grids adopted in 2023. By the end of 2025, a common Technopedia Platform operated by the ENTSO-E and the EU DSO entity should materialize, providing an overview of existing grid enhancing technologies. Enhancing the security and resilience of cross-border energy infrastructure projects is crucial for ensuring a reliable supply of energy. It is also a key priority of the current Commission mandate, especially in the context of emerging risks such as climate change impacts and malicious attacks on critical energy infrastructure.



Digitalisation

Q24: Do you agree that there is a need for additional EU action concerning visibility and quantified benefits of innovative, digital and grid enhancing technologies?

- ☐ Strongly disagree
- ☐ Slightly disagree
- ☐ Neutral
- ☒ Slightly agree
- ☐ Strongly agree
- ☐ Don't know

Q25: In your view, should there be further measures to increase the efficiency of the existing grid?

- ☒ Yes
- ☐ No

If yes, please specify:

Increasing the efficiency of the existing grid is one of the most cost-effective and timely strategies to accelerate the energy transition.

Rather than relying solely on grid expansion, a parallel focus should be placed on optimising the use of existing infrastructure—through, digitalisation, and flexibility through energy storage.

To achieve this, the following measures should be included in the Grid Package:

- Encourage system operators to optimise existing assets, including through innovative operational practices and advanced technologies that maximise available capacity and accelerate new connections.
- Support research, innovation, and deployment of emerging technologies—such as dynamic line rating, high-temperature superconductors, and advanced power flow control devices—until they reach commercial maturity. These technologies can significantly increase grid capacity and reduce congestion.



- Incentivise smart grid operation by ensuring that investments in innovative grid solutions are eligible for EU and national financing schemes, and that cost recovery mechanisms are in place for system operators.
- Introduce KPIs to measure and reward grid optimisation and the unlocking of connection capacity.
- Ensure that efficiency improvements complement, not replace, necessary grid reinforcements, and do not justify delays in executing planned infrastructure upgrades.

Security and Resilience

Q26: To what extent do you agree with the following statements?

| Objective | Strongly disagree | Slightly disagree | Neutral | Slightly agree | Strongly Agree | Don't know |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| The current EU legal framework, beyond the TEN-E Regulation, sufficiently addresses resilience and security criteria for cross-border infrastructure projects including recent and emerging risks such as climate change impacts | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Projects of common interest (PCIs) and Projects of mutual interest (PMIs) should be subject to additional security criteria to reduce exposure and/ or enhance readiness against physical and cyber risks | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The existing EU legal framework for grids, beyond | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> |



| | | | | | | |
|--|--|--|--|--|--|--|
| the TEN-E Regulation, allows to avoid non-trusted actors' participation in critical cross-border infrastructure projects | | | | | | |
|--|--|--|--|--|--|--|

Other:

The current framework does not sufficiently guide system operators on how to address the increasing risk due to high-impact-low-frequency events, for example, caused by climate change, as they become increasingly frequent.

Building preparedness for these events requires defining a climate adaptation plans with specific metrics, defining suitable ranges, quantifying the levels among system operators and using the metrics to support and justify work and delivery programmes to achieve the desired level of climate adaptation. There should be specific funding and a Resilience Incentive mechanism to encourage utilities to pursue adaptation measures.

Examples of metrics can be:

- % of overhead line networks which has undergone vegetation management to the required standard
- % of sites resilient to flash flooding out of total identified vulnerable to flash flooding
- % of HV primary substation transformers that have spare capacity for overloading

Flexibility

Pursuant to the existing EU regulatory framework, distribution network development plans shall provide transparency on the medium and long-term flexibility services needed and consider alternatives to grid development (such as flexibility, demand response or innovative grid technologies). There is also ongoing work between TSOs, DSOs, ACER and the Commission following up on the most recent revision of the Regulation (EU) 2019/943 on the internal market for electricity in 2024, mandating the regulatory authorities or dedicated authorities to conduct biannual assessment of flexibility needs. The relevant methodology, explaining inter alia the link to the network planning should be adopted in Q3 2025.

Q27: In this context, do you agree that the existing framework is sufficient for considering flexibility needs in network planning and development

☐ Strongly disagree



☒ Slightly disagree

☐ Neutral

☐ Slightly agree

☐ Strongly agree

☐ Don't know

Simplification

Q28: In view of simplifying the PCI/PMI selection process, to what extent do you agree with the following statements?

| Objective | Strongly disagree | Slightly disagree | Neutral | Slightly agree | Agree | Don't know |
|--|--------------------------|--------------------------|--------------------------|----------------|--------------------------|--------------------------|
| The current frequency of the PCI/PMI selection process (every 2 years) should be decreased e.g. every 3 years | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> |
| Project with PCI/PMI status should not be required to reapply for each PCI/PMI process, provided certain conditions are met (e.g. sufficient maturity, progress) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> |
| The application process should be further simplified | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> |

Please specify your reply providing, where possible, qualitative and quantitative evidence:

While the current biennial frequency of the PCI/PMI selection process appears appropriate, as it aligns with the TYNDP cycle, the overall duration of the process remains excessively long. Currently, more than 12 months elapse between the submission of candidate projects and the final establishment of the PCI list.



This extended timeline introduces significant challenges, as the status and maturity of candidate projects may evolve considerably during this period. Such changes can undermine the coherence and relevance of the analysis, ultimately affecting the robustness of the PCI list.

To address this, the selection process should be simplified and streamlined to enhance efficiency and responsiveness. In particular, projects that already hold PCI or PMI status should benefit from a simplified reapplication procedure, reducing administrative burden and ensuring continuity in project development.

Q28: In view of additional simplification measures, to what extent, do you agree that there is potential for simplification in the following areas?

| Objective | Strongly disagree | Slightly disagree | Neutral | Slightly agree | Agree | Don't know |
|--|--------------------------|--------------------------|---------|--------------------------|--------------------------|--------------------------|
| TYNDP process: Scenario building | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| TYNDP process: infrastructure gap identification | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Offshore network development planning process | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| PCI/PMI project monitoring and reporting | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Please specify your reply providing, where possible, qualitative and quantitative evidence.

Simplification is not necessarily the answer, but scenarios and input data can be improved to provide robust results.



Call for Evidence: Feedback Form

EASE Feedback:

EASE – The European Association for Energy Storage (EASE) welcomes the European Commission’s efforts to modernise the EU grid regulatory framework through the European Grids Package. As Europe moves toward an increasingly decentralised, electrified, and decarbonised energy system, the role of flexibility—particularly energy storage—must be central in both policy and grid planning. While the regulatory framework has evolved, significant gaps remain in how flexibility needs are systematically assessed, planned for, and integrated across both transmission and distribution levels.

Despite recent initiatives, the current framework is not yet sufficient to ensure that flexibility—including demand response, storage, and digital grid solutions—is fully considered as an alternative or complement to traditional grid reinforcements. National and EU-level network development plans often lack requirements to assess flexibility options or to compare their costs and benefits against conventional investments. Storage continues to be undervalued and underutilised, even though it can deliver congestion relief, balancing, and grid deferral services with greater speed and lower environmental impact.

Energy Storage Systems (ESS) are versatile assets capable of delivering multiple grid services from a single installation. Beyond demand shifting and renewable integration, ESS can provide synthetic inertia via grid-forming inverters, voltage control, and black start capabilities—functions traditionally covered by separate assets like synchronous condensers. To ensure a cost-effective and resilient grid, TSOs should be encouraged to fully consider the multi-service capabilities of ESS. Policy guidance may be needed to address existing biases toward conventional assets and to support the validation and integration of battery-based solutions for grid stability.

To close these gaps, EASE calls for clearer guidance and obligations on flexibility assessments in planning processes, with common methodologies and better DSO-TSO coordination and better grid connection procedures as well. Storage should be considered as a standard resource for grid services, and be reflected accordingly in system planning, cost-benefit analysis, and network development scenarios.



About EASE

The European Association for Storage of Energy (EASE) is the voice of the energy storage community, actively promoting the use of energy storage in Europe and worldwide. It supports the deployment of energy storage as an indispensable instrument within the framework of the European energy and climate policy to deliver services to, and improve the flexibility of, the European energy system. EASE seeks to build a European platform for sharing and disseminating energy storage-related information and supports the transition towards a sustainable, flexible and stable energy system in Europe.

For more information please visit www.ease-storage.eu

Disclaimer

This response was elaborated by EASE and reflects a consolidated view of its members from an energy storage point of view. Individual EASE members may adopt different positions on certain topics from their corporate standpoint.

Contact:

Contact: info@ease-storage.eu

+32 (0)2 743 29 82