

Unwrapping the Grids Package: What you need to know in a nutshell

Executive summary

The revision DSO Entity welcomes the European Grids Package as part of a broader **European Grids Momentum**, which recognises electricity grids as the backbone of a resilient, competitive, and sustainable European Union. With a focus on three core areas - **planning, permitting, and connection** - the Grids Package builds on the Grid Action Plan (2023) and DSO Entity's establishment as institutional partner (2021).

DSO Entity appreciates the proposed measures to introduce faster and more efficient **permitting procedures for grid infrastructure**. It also positively acknowledges the holistic approach to addressing grid connection challenges, in particular the emphasis on **anticipatory investments and the provision of a toolbox** - rather than a single prescriptive solution - to move beyond the 'first come, first served' approach. However, the introduction of tacit approval for DSO grid connection decisions in certain cases raises significant safety and technical concerns. Also, the proposed shift towards a more top-down scenario approach in an **energy system that is becoming increasingly decentralised, i.e. bottom-up**, does not appear to be fully aligned with the ongoing paradigm shift.

Overall, the Grids **Package falls short of fully recognising the decentralised and consumer-driven nature of the energy transition** and of providing a sufficiently enabling framework for Distribution System Operators (DSOs) as core enablers of the clean energy transition. Notably due to an insufficient acknowledgement of the investment challenge, compounded by **rising resilience requirements** and external constraints such as supply chains or staffing.

The relevance of Distribution System Operators (DSOs) for the EU:

DSOs are key for delivering a sustainable and resilient energy transition while keeping the lights on¹:



Managing increasingly diverse grid connection needs: More than 250 million consumers are connected to the electricity distribution grid, alongside an electric vehicle fleet expected to reach 30 million units by 2030, an additional 10 million heat pumps by 2027 and 70% of renewables. Together with TSOs, DSOs will need to accommodate the connection of data centers, with total electricity demand projected to grow by around 15% annually between 2023 and 2030².



A cornerstone of social and economic development: DSOs connect the majority of industrial consumers in Europe, create and support 835,000 direct and indirect jobs, and enable 1.5 million citizens to participate in energy communities across the EU.



A vast - yet often unseen - infrastructure: DSOs operate more than ten out of the eleven million km of electricity grids spread over the EU's territory, facing an annual investment need of EUR 61bn between 2030 and 2050 for its expansion, smartening and renewal.

¹ For references below if not other stated: DSO Entity (2025) Let's connect – DSOs as key enablers for a competitive, green and resilient EU. Available [online](#).

² European Data Centre Association (2025) State of European Data Centres 2025, p.5. Available [online](#).

Key aspects to be considered from a DSO perspective

- 1 INVESTING:** DSOs are facing rapidly increasing investment and financing requirements to deliver a sustainable and resilient transition. While it is acknowledged that more than €730 billion of the €1.2 trillion in required grid investments by 2040 will need to be allocated to DSOs (COM 2025, 1006, p. 1), the TEN-E framework remains predominantly focused on cross-border TSO projects. DSOs are largely limited to eligibility for smart grid projects and are excluded from Projects of Mutual Interest (PMIs), with additional uncertainty regarding the applicability of the newly added resilience category.
- 2 PLANNING:** In an increasingly decentralised energy system, national network planning becomes more bottom-up (DSO forecasts), inclusive (grid users) and cooperative (TSO-DSO). The inclusion of DSO forecasts and assumptions in TSO development plans (both TNDPs and the TYNDP) is essential to avoid bottlenecks at distribution level where new loads and generation are connected. It is welcome that the package highlights the need for close coordination between distribution and transmission planning, i.e. the integration of DSO inputs into TSO planning. The absence of further harmonisation of Distribution Network Development Plans (DNDPs) is positive, while more top-down planning approaches related to scenario building should be treated with caution.
- 3 PERMITTING:** Procedures can take up to 8-10 years in the medium- and high-voltage distribution network and are a major bottleneck for DSOs. The proposal to accelerate permitting procedures for grid infrastructure, including shorter time limits, the designation of electricity grids as projects of overriding public interest, and the introduction of one-stop shops, are positive. However, grid connection procedures differ from permitting processes facilitated by public authorities and should not be referred to as permits. Also, efforts to accelerate procedures must not compromise safety or technical requirements.
- 4 CONNECTING:** The holistic approach to grid connections is generally welcomed, notably its recognition of anticipatory investments, long-term planning and external challenges. While proposals to move beyond the 'first-come, first-served' principle are supported, clear national legal frameworks are needed to ensure legal certainty and practical implementation for grid operators. Some proposals on enhanced hosting capacity transparency risk go beyond existing EU legislation and may increase administrative burden with limited added value. DSO Entity supports capacity-based and static time-of-use tariffs which can improve cost reflectivity, highly dynamic tariffs risk excessive complexity and limited effectiveness.
- 5 NATIONAL IMPLEMENTATION AND LACKING ELEMENTS:** Given the national nature of DSOs, the package alone will not resolve all their underlying challenges. The implementation of forward-looking regulatory frameworks and anticipatory investments aligned with existing EU rules remains essential including adequate compensation and predictability about future earnings. The package also failed to sufficiently address other challenges, such as growing resilience requirements from extreme weather events and external constraints like supply chains or staffing.

Multi-level governance: In an increasingly interconnected and decentralised electricity system, close cooperation among key institutions is essential (EC, ACER, DSO Entity, ENTSO-E).