DSO ENTITY
DSOs FOR EUROPE

How to close the DSO funding gap at the EU-level addressing NRPP's and CEF-E/TEN-E

Drafted by DSO Entity's Task Force Finance

June 2026

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1. Introduction

The energy transition depends on a fully fit-for-purpose electricity grid across all voltage levels, from transmission to distribution. Recent EU initiatives, including the revised TEN-E Regulation[1], the expanded CEF-E budget[2], and the NRPPs, are important steps forward, but further efforts are needed to ensure adequate attention to distribution-level infrastructure.

While each instrument has its own role, taken together they still reflect a funding focus that remains weighted towards generation and transmission, leaving DSOs - who will integrate most new renewable capacity and manage a more decentralised system - facing investment uncertainty. A more coordinated and holistic approach across EU funding instruments, better-aligned priorities, and clearer guidance for Member States would help address congestion, reduce connection queues, and ensure a balanced development of the entire electricity system. By continuing to prioritise transmission infrastructure, the proposals perpetuate a structural funding gap for DSOs that must be addressed. This paper summarises DSO Entity's assessment of, and recommendations on, the relevant files currently under negotiation[3].

2. A holistic approach to EU funding

As the current geopolitical crises are demonstrating, the European Union must achieve energy independence as swiftly as possible in order to safeguard itself from external shocks that would otherwise continue to undermine industrial competitiveness, security of supply, and the general well-being of EU citizens.

The energy transition will require substantial private and public investment in electricity grids. As stated in the TEN-E proposal, electricity distribution grids will require the greatest investment up to 2040, amounting to an aggregate figure of EUR 730 billion. This surge in investment is underpinned by the fact that, by 2030, renewable energy sources (RES) are expected to increase by 42.5%, with 70% of new capacity connected to DSO grids.

This generation-side challenge is further compounded by a sharp rise in electricity demand driven by, among other factors: the electrification of transport (with a political target of 130 million electric vehicles, 85% of which will charge at home, alongside a significant uptake of electric buses and trucks); the electrification of heating (with an additional 10 million heat pumps expected by 2027); and large industrial loads including data centres and battery storage. Together, these trends present both a formidable operational challenge and a significant opportunity for DSOs to innovate and modernise.

[1] Trans European Network Energy (TEN-E) Regulation (amending Regulations (EU) 2019/942, (EU) 2019/943 and (EU) 2024/1789 and repealing Regulation (EU) 2022/869, COM(2025)).

[2] Proposal for a Regulation COM(2025)547, Establishing the Connecting Europe Facility for the period 2028-2034 and; Proposal for a Regulation COM(2025)565, Establishing the European Fund for economic, social and territorial cohesion, agriculture and rural, fisheries and maritime, prosperity and security for the period 2028-2034.

[3] DSO Entity (2026) The Grids Package: Unwrapping the TEN-E Regulation, available online and; DSO Entity (2025) Reaction to the proposal for a Multiannual Financial Framework 2028-2024, available online.

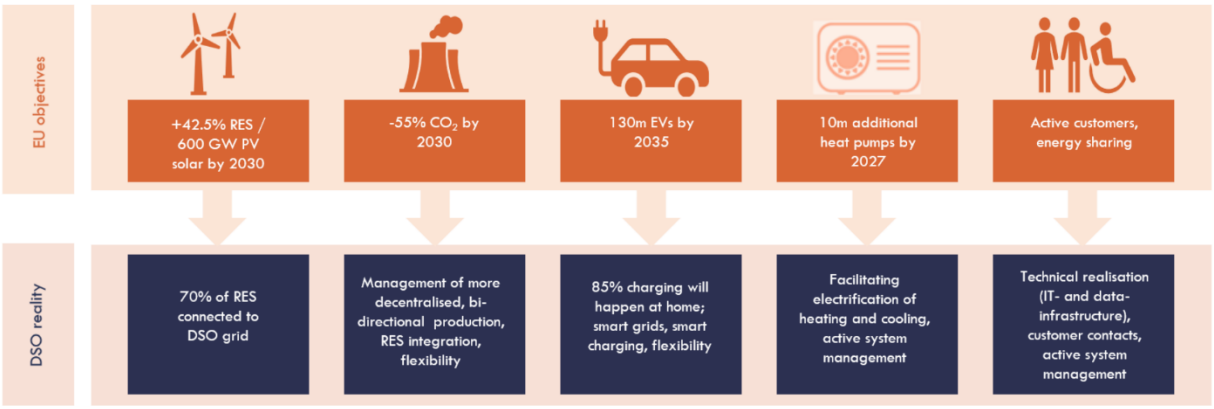

***Figure 1**: How DSOs will contribute to the EU energy transition targets.*

The proposed revision of the TEN-E regulation offers an assessment of current conditions and expected developments in the electricity sector. While maintaining its traditional cross-border focus, the text also acknowledges that "grids will need to adapt for the EU to have a more decentralised, digitalised and flexible electricity system.[4]" These introductory statements are commendable; however, they are not sufficiently translated into concrete proposals that would place the cross-border and distribution dimensions on an equal footing. This is particularly problematic given that distribution grids are not a parallel concern but a foundational prerequisite for delivering cross-border capacity and system integration.

TEN-E (together with the CEF) which serves as its funding instrument) and other public funding mechanisms currently under discussion in the context of the next Multiannual Financial Framework (MFF), including the National Recovery and Resilience Plans (NRRPs) and the Competitiveness Fund, differ in structure and purpose. Yet they all form part of the broader EU strategy for the energy transition. Taken together, a comprehensive assessment of the proposals currently on the table reveals that funding schemes remain skewed towards electricity generation and transmission infrastructure, leaving considerable uncertainty for DSOs. The case for balanced investment across all segments of the electricity value chain goes beyond sectoral interests: a surge in generation investment without commensurate distribution grid expansion and modernisation will only deepen congestion, ultimately delaying the energy transition.

To complement this initial analysis, the following sections will analyse the proposed TEN-E overhaul, the important role of the NRPPs, and in general the overall approach to EU funding for the energy sector.

[4] Trans European Network Energy (TEN-E) Regulation (amending Regulations (EU) 2019/942, (EU) 2019/943 and (EU) 2024/1789 and repealing Regulation (EU) 2022/869, COM(2025)), page 2: “Grids will need to adapt for the EU to have a more decentralised, digitalised and flexible electricity system with millions of rooftop solar panels and local energy communities sharing resources.”

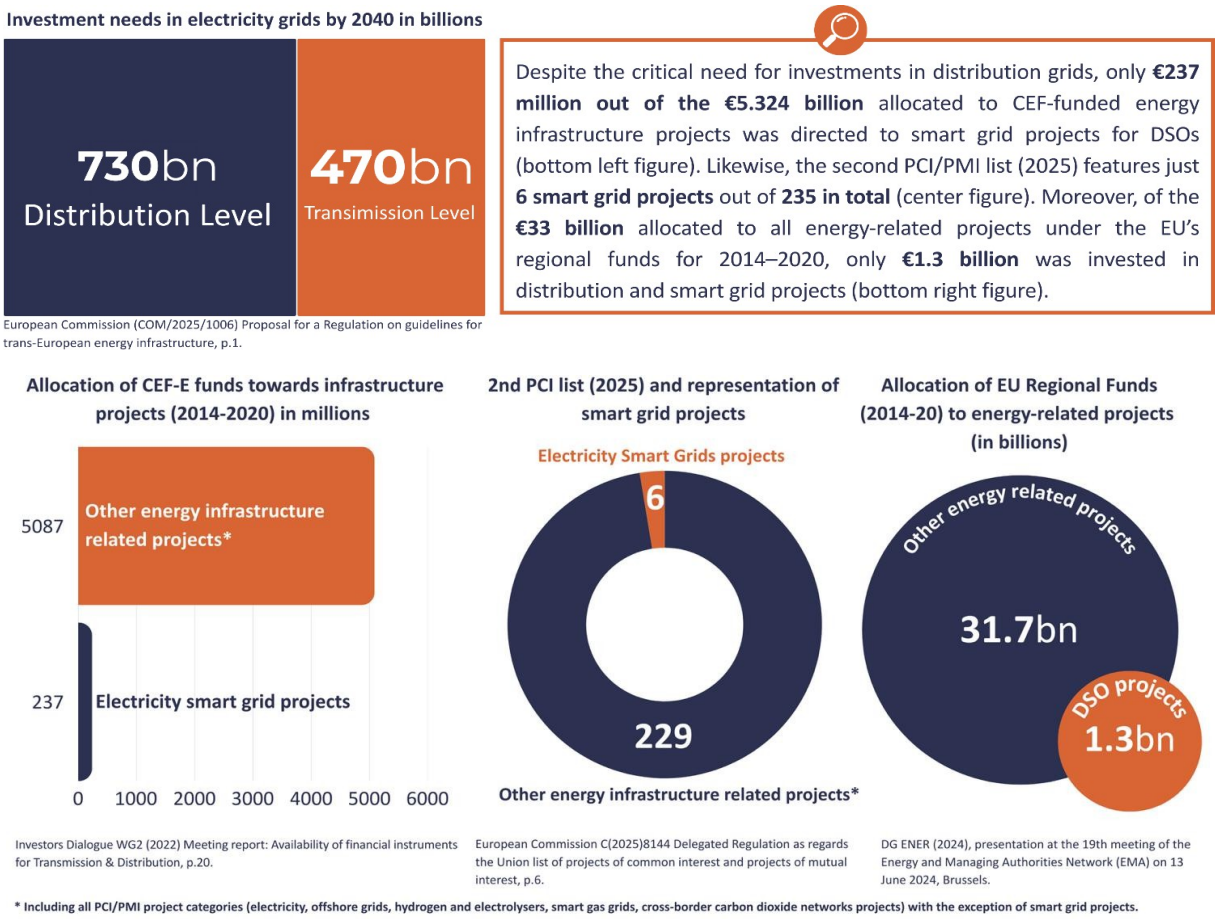

***Figure 2**: The DSO funding gap.*

3. Analysis of TEN-E regulation[5]

The TEN-E regulation (and subsequently CEF) has historically prioritised transmission cross-border projects, leaving smart grid initiatives and distribution grids in general as a secondary priority, underestimating their contribution to internal market in the context of increasing connection of renewable sources at lower voltage levels. This pattern has persisted even after the 2022 revision of the TEN-E Regulation, which included some simplifications for the application of smart grid projects such as the elimination of the obligatory participation of a TSO in the project or the need to demonstrate a positive physical cross-border effect.

The EC's December 2025 review of the TEN-E regulation introduces notable improvements in several areas, particularly around permit granting and broader administrative processes. Nevertheless, significant ambiguities persist regarding the overall structure of TEN-E and its suitability for DSOs.

In the table below, an assessment of the provision in the amended TEN-E regulation. Provisions highlighted in green signal a positive development, those in yellow require further clarification from the EC, while those in red are deemed as counterproductive.

[5] DSO Entity (2026) The Grids Package: Unwrapping the TEN-E Regulation, available online.

Provision	Explanation
Art 7.2: permit granting	Positive elements in the new permitting regime include the expansion of the overriding public interest to all grid projects, shorter permitting procedures and exemptions from environmental assessments.
Art 7.3: recognition of projects as having the status of highest national interest	Article 7.3 requires that projects on the Union list be granted the **highest national significance status** available under national law, meaning they are fast-tracked through permitting procedures, including environmental assessments, spatial planning, and land acquisition. This eliminates lengthy and fragmented approval processes. From a DSO perspective, this is welcome because permitting delays are one of the biggest bottlenecks in grid development. If DSO projects are eligible for this status, it could meaningfully accelerate the deployment of critical distribution infrastructure and help grids keep pace with the energy transition.
Art 8: establishment of a single point of contact	This should facilitate an easier permitting process for the applicant and also build the capacities of the one body processing such permitting applications.
Art 10: provision on maximum duration for the permit granting process and tacit approval	Article 10 stands out as one of the proposal's most ambitious provisions, introducing a maximum duration for the permit-granting process and the possibility of tacit approval where no reply is given. Since grid projects can take decades to receive full authorisation, this could have a tangible and lasting impact on Europe's ability to build the infrastructure the energy transition requires. It is therefore disappointing that these provisions exclude environmental decisions and member states where tacit approval has no basis in national law. While legally understandable, these carve-outs risk significantly undermining the practical value of an otherwise promising measure.
Annex II, point 1 e and f: DSOs eligibility in the resilience category	While the introduction of new infrastructure categories addressing resilience and digitalisation is welcome, their focus remains predominantly on transmission infrastructure. This is hard to reconcile with recent developments, as increasingly frequent extreme weather events significantly affect distribution networks at all voltage levels, and resilience measures such as the Network Code on Cyber Security are also occurring at the DSO level. Distribution grids therefore require stronger, more targeted support. Further clarification is needed on DSO eligibility under Annex II(1)(e) and (f), particularly for investments in network resilience and the monitoring, control, and digitalisation of critical network elements.
Annex II, point 1.g: DSOs eligibility in the Smart Electricity Grids category	The article is currently limiting projects at 'transmission and medium and high voltage distribution level, engaging entities present in at least two different countries' leaving out projects connecting renewable energy sources, storage facilities, and digital upgrades, with clear impacts on cross-border flows. Lower voltage levels should also be eligible to reflect the needs of DSOs.

Art 2.6: Smart Electricity Grid projects excluded from PMI	To ensure a level playing field across all categories, the current exclusion of SEG projects from PMIs and thereby limited participation of DSOs, should be addressed.

4. The importance of the NRPPs for distribution grids[6]

National and Regional Partnership Plans (NRPPs) represent a substantial financial framework, with €865 billion earmarked for sustainable development, competitiveness, and support for rural and maritime regions. Within the Regulation 2025/0240 European Fund for economic, social and territorial cohesion, agriculture and rural, fisheries and maritime, prosperity and security for the period 2028-2034, which should be administered through the NRPPs, Article 3 specifically states that one of the objectives of the Fund is to finance domestic transmission and distribution grids also taking into account the Trans-European Network (TEN-E). This presents a significant opportunity to strengthen and modernise grid infrastructure, particularly where Member States align their plans with the EU's broader climate and energy objectives.

Although the development of smart energy systems and domestic transmission and distribution grids is acknowledged in the text, no earmarking for grids has been proposed. Thus, access to these funds will ultimately depend on the national priorities outlined in each NRPP, i.e. is left to the discretion of Member States and regions. This creates a risk for the delivery of the energy transition as DSOs could be excluded from these. Without proper implementation guidance, this flexibility risks exacerbating existing challenges, including grid congestion and growing connection queues.

The following proposals outline **ways to better reflect DSO needs in the NRPPs**:

- In general, NRPPs should always devote funding to grid-related projects that adhere to EU strategic priorities.
- The introduction of a dedicated earmark for distribution grid infrastructure within the Regulation proposal establishing the Fund for Economic, Social and Territorial Cohesion. Specifically, Title III, Chapter 1, Article 22, 2.(r)(p.57 of the proposal) should be amended to include a requirement that a set percentage of the budget contributes directly to climate and environmental targets via grid development at the distribution level. This would ensure that investments in the expansion, renewal and smartening of electricity distribution grids are a guaranteed component of the EU's cohesion spending.
- Further, NRPPs and general investment strategies should reflect a simple principle: scaling up generation must go hand in hand with adequate funding for the energy networks that enable it. NRPPs should therefore avoid any bias against grid infrastructure and ensure balanced support across generation, transmission, and distribution. Each of these components is essential to delivering a reliable and future-proof energy system, and funding frameworks should treat them consistently in terms of eligibility, conditions, and access to support. Failing to do so risks distorting investment incentives and slowing the rollout of the integrated infrastructure required for the energy transition.

[6] DSO Entity (2025) Reaction to the proposal for a Multiannual Financial Framework 2028-2024, available online.

- Lastly, where constraints are identified within the national grid (e.g. bottlenecks or congestions, connection details, curtailment levels) by dedicated instruments such as the National Energy and Climate Plans (NECPs), the NRPPs should outline corresponding responses to address the resulting investment needs. This shall be done in a manner consistent with the planned electrification, renewable energy deployment and energy system integration in the NECPs. When assessing the NRPPs submitted by Member States, the EC should ensure the proposed funding plans are consistent with the infrastructure constraints and investment needs identified in NECPs. Where planned investments would not adequately address these identified needs, the EC should flag such discrepancies to the relevant Member State[7].

5. Conclusion

The energy transition cannot succeed without a grid infrastructure that is fit for purpose at every level, from transmission down to distribution. The proposals currently on the table, including the revised TEN-E regulation, the expanded CEF-E budget, and the NRPPs, represent meaningful steps in the right direction, though further work is needed to ensure that distribution-level infrastructure receives the attention it deserves. Taken individually, each instrument serves a distinct purpose; yet viewed together, they reveal a pattern where funding continues to flow disproportionately towards generation and transmission, while DSOs, which will connect the vast majority of new renewable capacity and manage an increasingly complex and decentralised system, face considerable investment uncertainty.

A more holistic approach to EU funding, one that considers all available instruments in a coordinated and complementary manner, would help ensure that no segment of the electricity value chain is left behind. Aligning TEN-E, CEF-E, and NRPPs around shared priorities and providing Member States with clearer guidance on how to direct investments effectively would go a long way towards managing congestion, reducing connection queues, and delivering on the broader objectives of European energy policy. The DSO Entity looks forward to continued engagement with the European Commission and other stakeholders in shaping a framework that works for the whole system.

[7] Related to the importance to better align planning (NECPs) and the distribution of EU-funding, see DSO Entity's reaction to the consultation of the Governance Regulation. Available online.