

Electrification Alliance response to the revision of the TEN-E regulation

The Electrification Alliance welcomes the proposal put forward by the European Commission for the revision of the TEN-E Regulation. A revision of the Regulation is much needed in light of the EU's 2030 and 2050 objectives and in order to channel investments in smart, reliable and efficient infrastructure that can deliver the transition to a net zero economy.

[In its position paper published in November 2020](#), the Electrification Alliance highlighted 5 priorities for a successful revision of the Regulation:

1. Revisit the selection criteria of the PCI list to ensure they are fully in line with the EU's 2030 and 2050 decarbonisation objectives
2. Make use of fully integrated energy scenarios in the TYNDP
3. Establish a governance system that better reflects the changing energy system
4. Prioritise funding for network optimisation, transformation, and decentralisation
5. Further simplify project permitting procedures

The proposal formulated by the Commission takes important steps forward for each of these areas. In particular, we welcome the proposed exclusion of support to new fossil fuel-oriented infrastructure where they would create stranded assets, the further simplification of Projects of Common Interest (PCI) permitting procedures and the mandatory sustainability criteria applicable to all energy infrastructure categories.

There are however still a number of areas in which we believe changes could be made to ensure the revised TEN-E Regulation provides for a fully future-proof energy infrastructure framework.

1. PCI selection criteria

The Commission's proposal references the importance of smart electrification and the application of the Energy Efficiency First principle as critical to achieving the 2050 targets. However, this principle is barely enforced when it comes to the concrete PCI selection. While grid reinforcements can be needed where infrastructure gaps are identified, **the benefits of energy efficiency improvements and the activation of demand-side flexibility from a pool of decentralised projects** should be equally valued. One way to achieve this would be by providing links between cross-border interests (article 4), the application of the Energy Efficiency First principle for the identification of infrastructure gaps (article 13) and eligibility costs (article 16).

Another aspect where we believe the proposal could be strengthened is regarding the definition of a project's contribution to the **energy security of supply** (article 4). This definition now usefully includes cyber security as one aspect. Furthermore, in addition to climate adaptation, we also consider that the ability of a project to improve climate resilience should be an important criterion for PCIs' choice.

2. Governance

The Commission proposal largely maintains the existing governance structures enacted under the previous TEN-E Regulation, where infrastructure needs are identified by electricity and gas transmission system operators. To future proof the TEN-E Regulation, we believe that the **cost benefit analysis** should include the smart electricity grids infrastructure, as well as take into account other non-infrastructure alternatives such as storage, demand-side response and electro-mobility.

In order to better reflect the changing nature of the energy system, we believe the ENTSOs should be asked to **source independent analysis of energy infrastructure needs** when drafting up the TYNDPs. The revised TYNDP process should seek input from all the stakeholders of the energy system, such as utilities and market players in the energy sector (electricity, gas, hydrogen, heat). In addition, and since integration of systems is not limited to the TSO level, there is a need for a greater role of DSOs in the TYNDP process: DSOs (via the future EU DSO Entity) should be closely involved in the development of the TYNDP scenarios, starting from the scenario building exercise.

Regarding the **cost-benefit methodology used for the energy system analysis**, the regulation should strive to offer a clearer framework so as to ensure a consistent approach based on a life cycle costing approach, under the supervision of ACER. While the mandatory "interlinked model" to be developed jointly by the ENTSOs is a significant methodological advancement which has already been exercised by TSOs at national and European level on a voluntary basis, the current proposal should also include a clear reference to the distribution infrastructure. Not including it would not be consistent with the ongoing exercise for the joint ENTSO-E/ENTSO-G TYNDP 2022 process which takes into account the distribution level in the scenarios, nor with the [conclusions of the latest 2020 Energy Infrastructure Forum](#) organised by the European Commission.

3. Network optimisation, transformation and decentralisation

The Commission proposal rightfully recognises the important role new assets, services and projects will play in delivering a decarbonised energy system and provides both a smart gas and smart electricity grid infrastructure category under Annex II. Yet, we would like to make the following suggestions.

In order to facilitate greater public acceptance of new electricity infrastructure, the Regulation should give due consideration for the **undergrounding of cable networks** of all voltage levels.

The cross-border criterion should be simplified to remove the current barrier for specific types of projects such as smart electricity grids. It should be assessed based on the participation of at least two Member States without necessarily involving a physical common border, recognising indirect effects such as cross-border demand side impacts. Cross-border cooperation should be fulfilled through strong cooperation on replicability, scalability and/or standardisation cooperation.

The selection criteria for **smart electricity grids** remain prohibitively restrictive for decentralised projects while most of them happen at low voltage levels which are operated by DSOs. Thus, we suggest that:

- The eligibility should be enlarged to projects happening at low, medium and high voltage level networks. In addition, the mandatory support of TSOs from at least two Member States for projects initiated by DSOs should be removed.
- The list of criteria for smart electricity grids should include a further criterion such as electrification of transports and final uses (e.g. criteria related to penetration of EV or heat pump penetration), distributed resources observability and flexibility services and enabling devices¹.
- As currently DSOs in many Member States are facing financial disincentives to pursue PCI status and financial support, smart grids and DSOs should also be subject to the incentives and to benefit from at least regulatory depreciation on project related assets (article 16 and 17).

Offshore wind hybrid projects combine offshore wind farms with interconnectors which could link more than 2 markets. Offshore Hybrids are essential to meet EU's net-zero ambitions by 2050. They save space and money by optimising the use of offshore transmission infrastructure. And they help to balance the European energy system facilitating renewables integration. But these benefits won't happen if the build out of offshore wind farms and their interconnectors are not coordinated. The TEN-E regulation should recognise this coordination as crucial in the definition of offshore hybrids in Annex II by including the offshore wind farm as part of the offshore hybrids' planning and permitting. Today it only recognises the grid elements of offshore hybrids. This partial definition does not address the fundamental role of coordination needed to build these projects.

¹ With regards to observability: to operate its grid properly and securely, system operators must know what is happening in part of their neighbouring grids.

Regarding the inclusion of a **hydrogen infrastructure category**, we reiterate that direct electrification is the most efficient and cost-effective pathway to decarbonise energy end-uses. The Regulation should prioritise support to electricity infrastructure, energy efficiency and demand-side measures as primary criteria before assessing investments in hydrogen infrastructures. Investments in hydrogen infrastructure or repurposed gas pipelines for the transport of hydrogen should be made on the basis of a clear cost-benefit analysis and look to specifically link grid development to the supply of renewable hydrogen to be used in a targeted manner, supporting decarbonisation of hard-to-abate sectors.

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