

Christian Zinglensen

Director EU Agency for the Cooperation of Energy Regulators

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Dear Christian,

Congratulations on the position paper published by ACER on 22 November 2021 on the efficiency of infrastructure and the role of regulation in incentivising smart investments and enabling the energy transition [1]. It rightly recognises the need to incentivise Transmission System Operators (TSOs) to invest in state-of-the-art grid optimisation technologies. These technologies can come about much faster than networks complementing network build-out. They can also improve network efficiency and bring immediate benefits to end consumers.

Increased network efficiency is crucial for maximising the uptake of local renewable generation and for reducing Europe's dependence from Russian fossil fuels and fossil fuels from elsewhere. It is central to delivering the reinforced ambitions on renewables expansion and energy security set out in RePowerEU.

As it stands the existing regulatory framework is not doing enough to incentivise network companies. WindEurope, currENT and T&D Europe are concerned that the current framework favours TSO investments in high CAPEX traditional grid infrastructure over cheaper and easily deployable grid optimisation technologies [2] [3]. ENTSO-E acknowledges that the TSO investment framework should properly reward TSOs for investing in innovative solutions - not just in conventional grid infrastructure [4].

We support ACER's recommended move to a benefit-sharing regime complementing the cost-based remuneration scheme. This could help to incentivise TSOs to invest in grid optimisation solutions as well and not just in conventional transmission lines. There are clear benefits of this for system users - lower energy bills for consumers, larger shares of variable renewables in the system and lower CO₂ emissions.

For this benefit-sharing regime to be efficient, we also need to start addressing all TSO costs in the same manner, whether as capital or operational expenses. These include investments in transmission lines and grid optimisation technologies, operation and maintenance costs, and procurement of flexibility. This is not the case in most national frameworks today, where CAPEX is capitalised and added to the Regulatory Asset Base. This forms the basis of allowed TSO revenues while OPEX is expensed after approval.

With a TOTEX or an output-oriented approach, a share of the TOTEX could be added to the basis and the rest could be expensed, without distinguishing between CAPEX and OPEX. In this way the TSOs would not be biased towards high CAPEX investments. This approach is used in the UK and has been assessed by other EU TSOs [4], [5], [6].

We also want to underline the role of KPIs in measuring the benefits of grid investment [7]. We feel these indicators bring more clarity and long-term perspective to operators – especially when deploying new innovative solutions. Smart grid indicators are being defined at a national level following the adoption of the Clean Energy Package, in particular Article 59 of the Electricity Directive. We encourage national energy regulators to consider the role of innovation here.

On top of this ENTSO-E has done pioneering work on the Technopedia which lists 65 important technologies. Each entry includes a description, Technology Readiness Level and applications of the technology and references. This exercise is done in conjunction with stakeholders and will be expanded to Distribution System Operators, through the EU DSO Entity. The Technopedia should now be leveraged at a national and European level. National Regulatory Authorities (NRAs) should include it as a reference in their Network Development Plans, for example. This would support TSOs in enlarging their transmission investment options beyond conventional ones, in a harmonised way.

We would like to stress that time is of the essence. With the 2030 efficiency and renewable targets in place, grid transformation needs to happen at a faster pace. Investments in large-scale infrastructure assets are long-term decisions. Factoring in permitting and building times, it can take up to six years on average to complete a project. In some cases smart technology could help to reduce the time considerably.

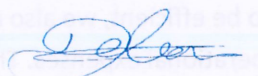
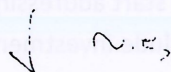
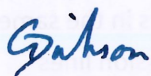
We the undersigned would be happy to explore with you potential next steps in improving the regulatory framework across Europe. We are also keen to ensure that NRAs and TSOs across Europe start to make moves toward this new output-based approach and investment framework.

Yours sincerely,

Giles Dickson

Susanne Nies

Diederik Peereboom, Secretary General, T&D Europe



- [1] ACER, "[Infrastructure efficiency: the role of regulation in incentivising smart investments and enabling the energy transition](#)", 2021
- [2] WindEurope, "Making the most of Europe's grids: Grid optimisation technologies to build a greener Europe", 2019
- [3] Consentec (for currENT Europe), "The Benefits of Innovative Grid Technologies", 2021
- [4] ENTSO-E, "Why remuneration frameworks need to evolve", 2021
- [5] Oxaera (for Tennet), "Smarter incentives for transmission system operators", 2018
- [6] Bremen Energy Working Papers (Brunekreeft, G.; Kuszniir, J. & Meyer, R.), "Output-orientierte Regulierung – ein Überblick", 2020. <https://bremen-energy-research.de/wp-content/bewp/bewp35.pdf>
- [7] T&D Europe, "Future proofing electricity grids in the EU Green Deal age: Assessing and monitoring capabilities of European grids to deal with evolving future requirements", 2020.
<https://tdeurope.eu/component/attachments/attachments.html?id=1631>

