

**OPINION No 04/2022**  
**OF THE EUROPEAN UNION AGENCY**  
**FOR THE COOPERATION OF ENERGY REGULATORS**

**of 5 May 2022**

**on ENTSO-E's Research, Development and Innovation Implementation  
Report 2021-2025**

THE EUROPEAN UNION AGENCY FOR THE COOPERATION OF ENERGY REGULATORS,

Having regard to Regulation (EU) 2019/942 of the European Parliament and of the Council of 5 June 2019 establishing a European Union Agency for the Cooperation of Energy Regulators<sup>1</sup>,

Having regard to Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 concerning the tasks of the European Network of Transmission System Operators for Electricity, and, in particular, Articles 30(1)(h) and 31(1) thereof,

Having regard to Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 concerning the monitoring tasks of the European Union Agency for the Cooperation of Energy Regulators, and, in particular, Article 32(1) thereof,

Having regard to the favourable opinion of the Board of Regulators of 6 April 2022, delivered pursuant to Article 22(5) of Regulation (EU) No 2019/942,

Whereas:

**1. INTRODUCTION**

- (1) On 8 February 2022, the European Union Agency for the Cooperation of Energy Regulators ('ACER') received from the European Network of Transmission System Operators for Electricity ('ENTSO-E') its Research, Development & Innovation Implementation Report 2021-2025 ('RDI Implementation Report 2021-2025'). The document identifies 13 RDI project concepts for TSOs to be deployed to deliver the targets of the ENTSO-E RDI Roadmap 2020-2030<sup>2</sup>.

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<sup>1</sup> OJ L158, 14.6.2019, p. 22.

<sup>2</sup> ENTSO-E RDI Roadmap 2020-2030.

## **2. OVERVIEW OF THE RDI IMPLEMENTATION REPORT**

- (2) ACER welcomes ENTSO-E's efforts to focus the research, development and innovation ('RDI') plans of its TSO members through the RDI Implementation report 2021-2025, to deliver the targets of the ENTSO-E RDI Roadmap 2020-2030.
- (3) ACER notes that the path towards a net zero emissions by 2050 requires dynamic adaptation from Transmission System Operators ('TSOs'). Having a coordinated pan-European approach to R&I activities allows to tap into synergies and avoid overlaps which can lead to more cost efficient tackling of the challenges ahead.
- (4) The RDI Implementation report 2021-2025 provides an overview of the planned RDI activities and defines tangible goals in terms of the Technology Readiness Level ('TRL') levels to be achieved typically ranging from 'proof of concept' to a 'prototype system'.
- (5) TSOs use different strategies and instruments for RDI activities. Although some have dedicated RDI departments, ACER believes most will chose to run RDI activities through third parties, such as research institutes, universities and other interested stakeholders.
- (6) Each of the 13 project concepts is attributed with a bottom-up budget estimate. ACER understands these estimates are for information only and do not pose any commitment on the TSO side to deliver results. In addition, there is no clear explanation on how these projects are to be financed, i.e. are TSOs counting on regulated financing or support schemes such as Horizon Europe.
- (7) The RDI Implementation report 2021-2025 was accompanied by a comprehensive stakeholder interaction report, providing both stakeholder comments and ENTSO-E's reactions to them,

### **HAS ADOPTED THIS OPINION:**

1. ACER recommends that ENTSO-E links the RDI Implementation Report 2021-2025 objectives, as well as the objectives of the broader scoped RDI Roadmap 2020-2030, with the TSOs' core tasks<sup>3</sup>. All proposed project concepts should have a clear and undisputable link to at least one of the core TSO objectives, explaining the future challenge for TSOs to fulfil these core tasks and how the project aims to solve the issue. TSOs should follow closely the RDI projects and already start considering possible

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3 (i) enabling an effective European market, (ii) secure system operation and (iii) efficient transmission system development.

technical, legal and other challenges related to the potential future wide scale implementation.

2. ACER observes that the bottom-up budgetary planning seems difficult to abide and lacks a clear objective. We thus recommend ENTSO-E to either treat the budget estimates as indeterminable (thus remove them from the RDI Implementation Report), or improve their transparency, especially regarding how they were constructed and which TSOs committed to which project concepts. In addition, monitoring of real expenses should be implemented, to help keep track of investments.
3. ACER observes there is no delegation of these project concepts amongst its members, which could help achieve a stronger commitment of TSOs towards achieving the projects' specific goals. In addition, this would enable other stakeholders to have a clear contact to the project via its leading TSO in case of interest to cooperate. If such delegation is not possible, ACER recommends ENTSO-E to facilitate the much needed interaction between stakeholders interested in participating and the TSOs willing to do the same, potentially establishing a cooperation platform for such a purpose.

This Opinion is submitted to ENTSO-E and the European Commission.

Done at Ljubljana, on 5 May 2022.

**- SIGNED -**

*For the Agency  
The Director*

C. ZINGLERSEN