TSO–DSO Joint Work Plan 2026 With A Forward Outlook

April 2026

DSO ENTITY
DSOs FOR EUROPE

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Contents

Executive Summary

Close coordination between system operators across voltage levels is a key enabler for affordable, secure, and decarbonised electrification. EU legislation emphasises the criticality of this collaboration and identifies several joint activities between transmission system operators (TSOs) and distribution system operators (DSOs). ENTSO-E and DSO Entity (hereinafter also referred to collectively as the "**Associations**"), as the representative Associations for European TSOs and DSOs, are committed to facilitating this collaboration and driving the development of common deliverables.

The Memorandum of Understanding (MoU)[1] between ENTSO-E and DSO Entity, signed on 11 January 2022,[2] foresees a joint annual work plan that identifies the main areas of collaboration and the common activities between the two Associations for that year.

The 2026 Joint Work Plan between ENTSO-E and DSO Entity (hereinafter "**TSO-DSO Joint Work Plan 2026**") defines both regulatory implementation priorities – guided by EU legislation, official European Commission (EC) Communications, and other formal mandates – and joint strategic priorities, stemming from a shared ambition to develop a reliable, resilient, and secure power system for a carbon-neutral Europe. In addition to these two categories, certain transversal activities are also included to enable efficient TSO–DSO collaboration.

The joint strategic priorities serve as a priority list for coordinated engagement between the two Associations. While they may evolve into deliverables, their primary purpose is structured exchange and knowledge sharing. Furthermore, all priorities described in this document are aligned with the respective Annual Work Programmes of ENTSO-E and EU DSO Entity. The TSO–DSO Joint Work Plan complements the respective work programmes of the Associations by focusing specifically on joint activities.

To provide structure and clarity, the TSO–DSO Joint Work Plan 2026 applies a tagging system that groups priorities into four vertical categories:

- **Planning & Investments**
- **Markets & Operations**
- **Security & Resilience**
- **Smart Grids & Innovative Solutions**

A horizontal layer of "**Institutional Cooperation**" provides the necessary foundation for collaboration between the two Associations across all vertical categories.

1 MoU between ENTSO-E and EU DSO Entity

2 An updated MoU between ENTSO-E and DSO Entity is currently under development. The development of an annual TSO–DSO work plan will be maintained in the new document.

The TSO–DSO Joint Work Plan 2026 highlights only areas of collaboration and common activities that require an equal or similar allocation of resources from both Associations or that involve the development of a joint deliverable. Therefore, certain areas in which the Associations collaborate through stakeholder forums or groups, such as European Stakeholder Committees (ESCs), Stakeholder Reference Groups (SRGs), and Common European Data Spaces, are not listed in the work plan, even though this collaboration will continue as needed. The work plan provides a forward outlook, with several activities extending beyond 2026.

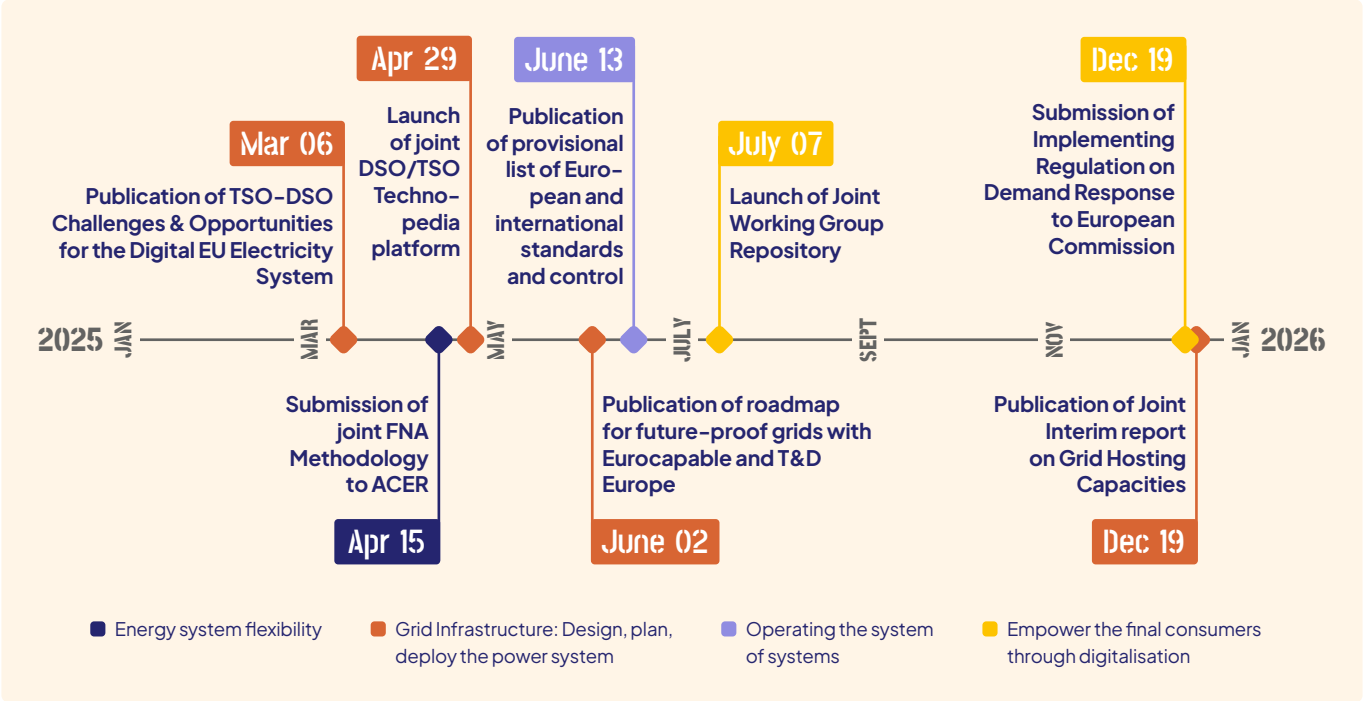
Furthermore, any new area in which ENTSO-E and DSO Entity are tasked to work together by EU legislation or official EC Communications during the course of the year will be integrated into the TSO–DSO Joint Work Plan 2026. This includes, but is not limited to, any joint work coming from the Strategic Roadmap for Digitalisation and AI for Energy, the Electrification Action Plan, or the Trans-European Networks for Energy. The TSO–DSO Joint Work Plan 2026 should also incorporate tasks that originate from the recommendations from the Expert Panel's final report.

Milestones in TSO–DSO Cooperation in 2025

The TSO–DSO workplan 2025[3] identified four key areas for cooperation, defined by legislative and policy developments during 2024–2025:

- Energy System Flexibility
- Operate the System of Systems
- Grid Infrastructure: Design, Plan, Deploy the Power System
- Empower the Final Consumer through Digitalisation.

Across all four domains, ENTSO-E and DSO Entity have established strong collaboration and successfully delivered joint outputs, with some key results illustrated in the figure below. The Associations have strengthened their cooperation through the joint development of Network Codes, such as the Network Code on Demand Response (NC DR), which represents a major step in facilitating demand-side flexibility, and the Network Code on Cybersecurity, which establishes a common level of cyber resilience across the power system. In parallel, the Implementing Acts on Data Interoperability draw on the combined expertise of TSOs and DSOs to define harmonised interoperability requirements and establish standard procedures for information exchange. Joint efforts stemming from the EU Grid Action Plan (2023) on Technopedia, grid hosting capacity information, supply chains, and the digitalisation of energy systems have further improved alignment among system operators and helped position them at the forefront of innovation.



3 TSO–DSO work plan 2024–25

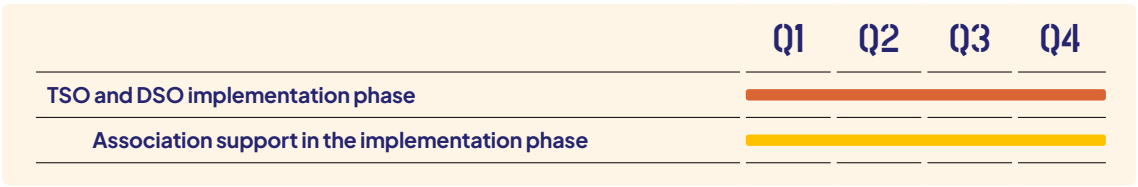
Regulatory Implementation Priorities

The following activities represent the key areas of joint work assigned to ENTSO-E and DSO Entity through EU legislation, official EC Communications, and other formal mandates. It includes activities that continue from the 2025 work plan and any new joint mandated activities identified in 2025. Any new activity assigned to the two Associations in 2026 will be incorporated into the joint work plan, even if it is not yet reflected in the current list. More detailed descriptions of each activity, including deliverables and implementation milestones, are provided in the Annual Work Programme for 2026 of both Associations.[4,5]

1.1 Flexibility Needs Assessment Methodology

Area: Planning & Investments

As mandated by Article 19e (4) of Regulation (EU) 2019/943, which was introduced by the Electricity Market Design Reform (EMDR) Regulation (EU) 2024/1747, ENTSO-E and the EU DSO Entity were tasked with jointly developing the type and format of data, as well as a methodology for analysing flexibility needs at the national level. To this end, the Associations established a joint task force to prepare the proposal defining the required data formats, types, and analytical approach for flexibility needs assessments (FNAs) by system operators. This proposal was successfully submitted to ACER within the nine-month deadline and formally approved in July 2025, marking the official launch of the FNAs at the Member State level. Going forward, ENTSO-E and the DSO Entity will support TSOs and DSOs during the implementation phase, including by coordinating the data and analysis required for the preparation of national FNA reports in line with the methodology, and by providing guidance on recurring implementation challenges faced by system operators.



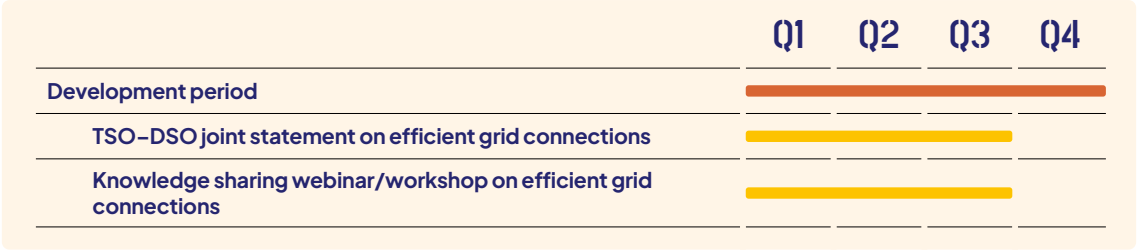
4 ENTSO-E Annual Work Programme 2026

5 DSO Entity Annual Work Programme 2026

1.2 Efficient Grid Connections

Area: Planning & Investments

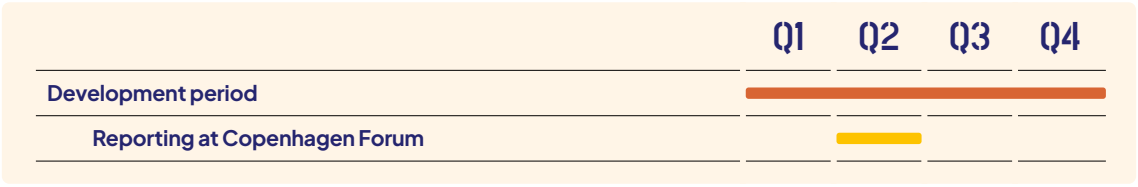
Building on the EC's Guidance on Efficient and Timely Grid Connections (C/2025/6703), part of the European Grids Package, ENTSO-E and the DSO Entity are committed to sharing knowledge, exploring alignment, and engaging in expert-level collaboration through workshops/webinars or a joint study.



1.3 Best Practices in Network Planning

Area: Planning & Investments

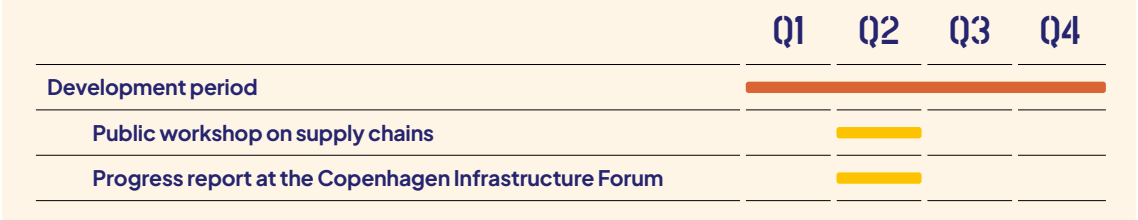
EU DSO Entity and ENTSO-E focus on strengthening DSO–TSO collaboration in network planning at the national level. The work aims to identify and document effective approaches to align planning methodologies and coordinate investment priorities. The outcome will support a common understanding and more coordinated planning processes between DSOs and TSOs across Europe.



1.4 Supply Chains and Public Procurement

Area: Planning & Investments

Building on the joint roadmap towards resilient supply chains,[6] ENTSO-E and the DSO Entity are committed to conducting knowledge-sharing activities and exploring joint positions on topics introduced by the EC's Communication – An EU Action Plan for Grids (COM/2022/552), Action 13, as well as related areas such as skilled workforce, circular economy, investment visibility, and asset management and implementation.

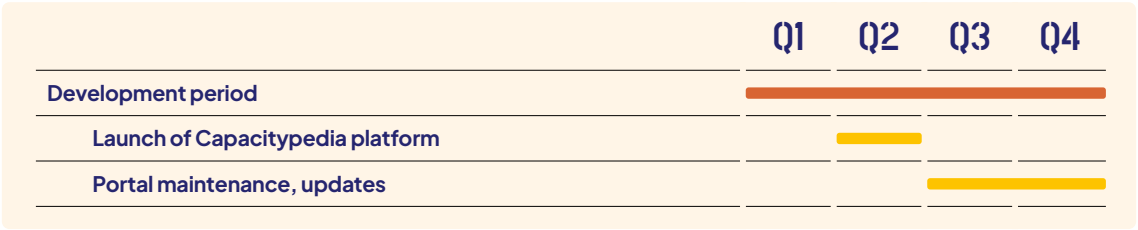


6 Roadmap towards Future-proof Grids | EU Grid Action Plan Action 13

1.5 Hosting Capacities

Area: Planning & Investments

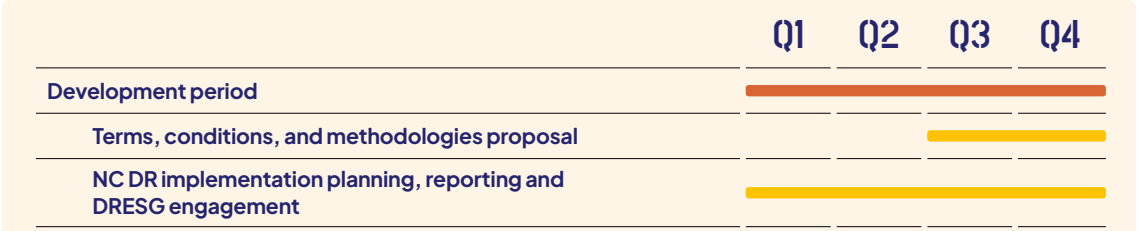
Under Action 6 of the EC's Communication – An EU Action Plan for Grids (COM/2022/552), DSO Entity and ENTSO-E are working to establish a pan-European overview of available grid hosting capacities. The general goal of Action 6 is to improve visibility on grid capacity and connection requests, supporting the planning of renewables, storage systems, EV charging stations, and other relevant new project developers. The main deliverable will be the DSO Entity and ENTSO-E Capacitypedia, a common IT platform designed to provide clarity on grid hosting capacity information by describing and explaining commonly used terms and techniques for presenting such information by system operators.



2.1 Network Code on Demand Response

Area: Markets & Operations

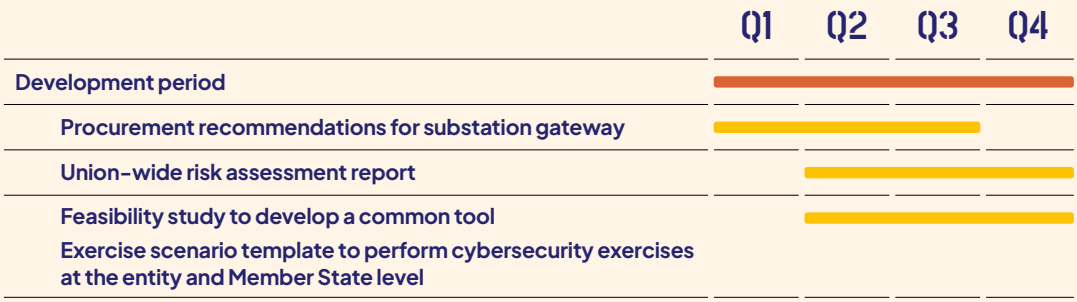
Pursuant to Article 59(9) of Regulation (EU) 2019/943, ENTSO-E and the DSO Entity submitted the NC DR package (including the NC DR, and amendments to the EB Guideline, the System Operation Guideline (SO GL), and the Demand Connection Network Code) on 8 May 2024 to ACER. Following the submission of ACER's Recommendation No 01/2025 on a reasoned proposal for the establishment of the NC DR in March 2025, ENTSO-E and DSO Entity will monitor and support the adoption process by the EC (currently planned to start in Q1 2026) and carry out planning work to implement the NC DR starting in 2026.



4.1 Network Code on Cybersecurity

Area: Security & Resilience

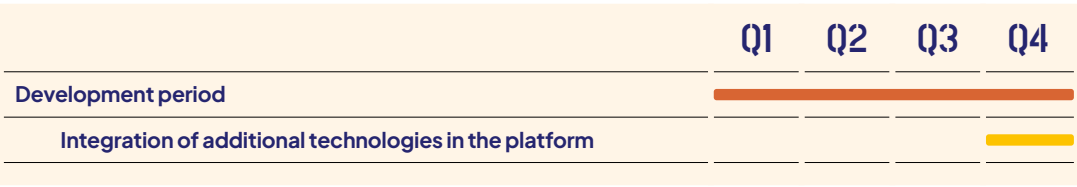
In line with Article 6 (1) of European Commission Delegated Regulation (EU) 2024/1366 (NCCS Regulation), ENTSO-E and DSO Entity will continue their collaboration to develop terms, conditions, and methodologies (TCMs) and other related recommendations foreseen by the NCCS Regulation, and to support their implementation.



3.1 Technopedia

Area: Smart Grids & Innovative Technologies

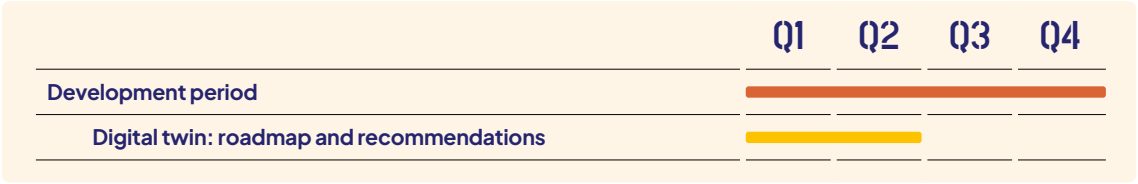
This work package promotes the adoption of innovative grid technologies through the continued development of the joint DSO/TSO Technopedia, as requested by Action 7 of the EC's Communication – An EU Action Plan for Grids (COM/2023/757). Building on the successful launch of the common IT platform in 2025, ENTSO-E and DSO Entity will expand its content and improve its methodology for collecting and reviewing technological solutions relevant to system operators.



3.2 Digitalisation of Energy System Action Plan

Area: Smart Grids & Innovative Technologies

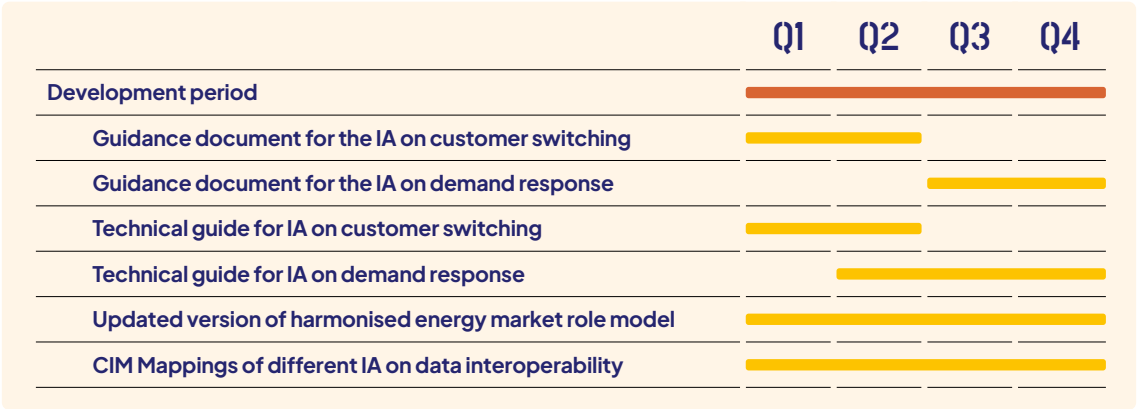
In alignment with the EC's Communication - Digitalising the energy system – EU action plan (COM/2022/552), ENTSO-E and the EU DSO Entity are actively collaborating through the Joint Task Force for DESAP. This partnership is driving progress on key deliverables, including the recently published Common TSO-DSO Challenges & Opportunities report[7] (February 2025), use cases and digital twin solutions[8] (January 2026), a digital twin roadmap (planned in late Q2 2026), and a smart grid indicators framework to measure performance and effectiveness.



3.3 Implementing Acts on Data Interoperability

Area: Smart Grids & Innovative Technologies

In line with the Commission Implementing Regulation (EU) 2023/1162 on interoperability requirements and non-discriminatory and transparent procedures for access to metering and consumption data, ENTSO-E and EU DSO Entity continue their cooperation on data transparency and interoperability within the Joint Working Group (JWG) on data interoperability, established in 2023. The JWG supports and advises the EC in monitoring and further developing the implementing acts on data interoperability in accordance with Article 24(2) of Directive (EU) 2019/944 and Article 12(2) of Implementing Regulation (EU) 2023/1162. This joint work aims to ensure consistent mapping and further development of data interoperability requirements and rules for metering and consumption data, demand response, and customer switching, while also supporting the EC in any additional implementing acts on data interoperability it may deem necessary. DSO Entity and ENTSO-E will also continue to update the JWG Repository, a common IT platform mandated by Article 12(1)(c) of Regulation (EU) 2023/1162 and established in July 2025. The JWG Repository publishes guidance for Member States on mapping national practices for data interoperability, the collected mappings and their version history, and other relevant information supporting European energy service interoperability. This includes, but is not limited to, implementing acts on data interoperability adopted by the EC and data interoperability models.



7 Report TSO-DSO Challenges & Opportunities for Digital Electricity System

8 Joint Report on TSO-DSO Digital Twin Use Cases

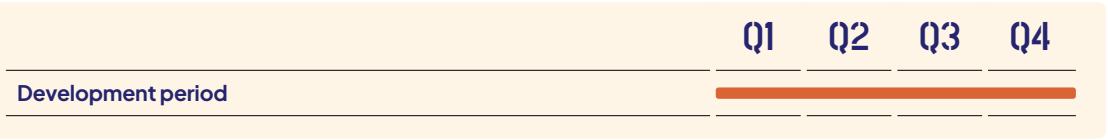
TSO–DSO Joint Strategic Priorities

In addition to the regulatory implementation priorities, guided by EU legislation, official EC Communications, and other formal mandates, ENTSO-E and DSO Entity recognise several areas where coordinated action, collaboration, or structured exchanges bring clear added value. These areas reflect shared strategic interests that go beyond mandated activities and support knowledge exchange, innovation, and improved cooperation between system operators.

1.6 TSO–DSO collaboration on System Development

Area: Planning & Investments

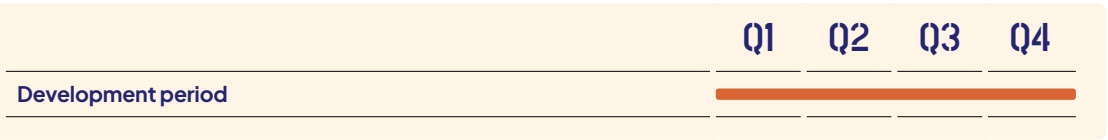
Exchange of information between ENTSO-E and EU DSO Entity on system development methodologies and planning approaches (e.g. IoSN and CBA methodologies).



1.7 Investments and Regulatory Frameworks

Area: Planning & Investments

Both TSOs and DSOs face increasing challenges to develop, finance, and build electricity grids and to connect new generation and electricity demand to the grid and transport electricity. TSOs and DSOs can collaborate to share best practices in areas such as financing investments, including accessing EU funding (e.g. CEF-E, the new Competitiveness Fund), loans, and de-risking instruments for financing grids (e.g. guarantees from state organisations, development banks or the EIB, green bonds).

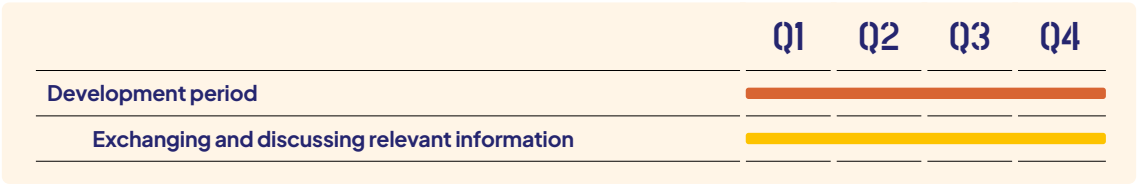


2.2 Grid-Forming Implementation Roadmap

Area: Markets & Operations

As provided in Article Y(5) of ACER's Recommendation to amend the Network Code on Requirements for Generators (NC RfG 2.0), the relevant TSO, in coordination with the relevant system operator, may specify that Type A power park modules shall be capable of providing grid-forming capability at the connection point. The Member State or its designated entity may require that the relevant TSO, in coordination with the relevant system operator, specify that Type A power park modules shall be capable of providing grid-forming capability at the connection point. In this case, the Member State or a designated entity shall develop a roadmap within two years after entry into force of the NC RfG 2.0 Regulation in order to assess a rollout of grid-forming capability, which may include impact assessments on oscillations, island mode detection, or other technical challenges.

The roadmap will cover Types A, B, and C power park modules and electricity storage modules < 10 MW connected below 110 kV, leaving it to Member States or a designated entity to decide whether grid-forming capability is required. Mandatory grid-forming requirements apply at 110 kV and above. Therefore, TSO–DSO coordination is beneficial for monitoring Member States' and DSOs' activities from both system needs and implementation perspectives.

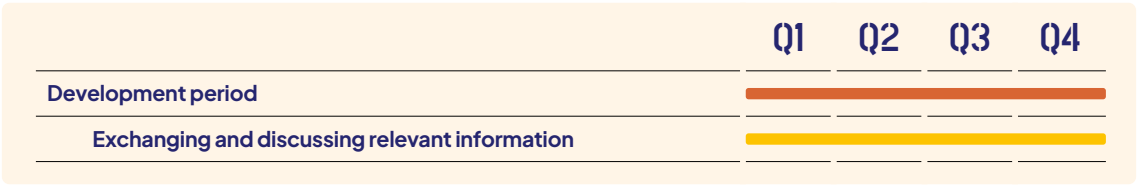


2.3 DSO Protection Schemes and Methods

Area: Markets & Operations

The new capabilities included in ACER's CNC 2.0 recommendations may require updates to some DSOs' protection schemes. TSO–DSO discussions would be beneficial to collect feedback on how DSOs plan to adapt protection schemes to comply with the new requirements, including – but not limited to – the fault ride-through requirement for Type A generators and grid-forming capability.

The goal is to foster an open discussion on new capabilities and known protection issues in distribution systems, with the aim of ensuring system security and stability. This also includes the schemes and methods for anti-islanding detection to address the new capabilities defined in NC RfG 2.0 and NC DC 2.0 (for electric vehicles and Type A power park modules).



2.4 TSO–DSO Cooperation on SOGL 2.0

Area: Markets & Operations

The following activities consist of technical exchanges between ENTSO-E and EU DSO Entity on operational topics relevant to the upcoming review of the SO GL.

INCREASING VISIBILITY OF PV INFEED

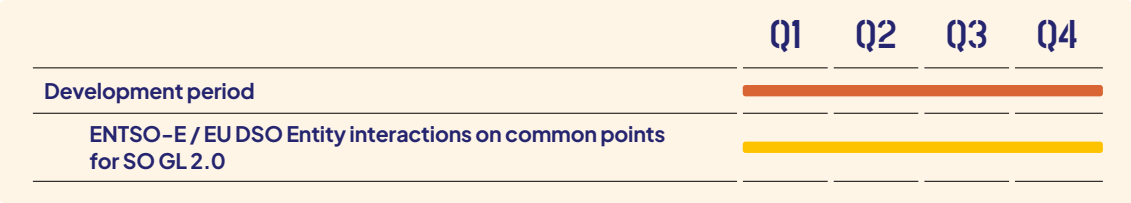
TSOs face significant challenges with PV infeed, as there are no direct ways of controlling them. Many PVs are Type A generation units connected to the distribution grid and are not subject to observability or controllability requirements. This makes PV integration a relevant topic for engagement between ENTSO-E and DSO Entity, including discussions on data exchange regarding their participation in different services.

EXCHANGE OF AGGREGATED DATA FOR DISTRIBUTION-CONNECTED RESOURCES WITH LIMITED CAPACITY

The proliferation of small-scale generation, storage, and flexible load resources in the distribution network is ongoing and expected to increase. This development must be accompanied by short-term forecasting and real-time observation of resources. Such information would also help TSOs estimate contributions to, for example, balancing. The optimal aggregation of data for small-capacity units to be shared between DSOs and TSOs requires further exploration.

DSO–TSO COOPERATION ON VOLTAGE MANAGEMENT

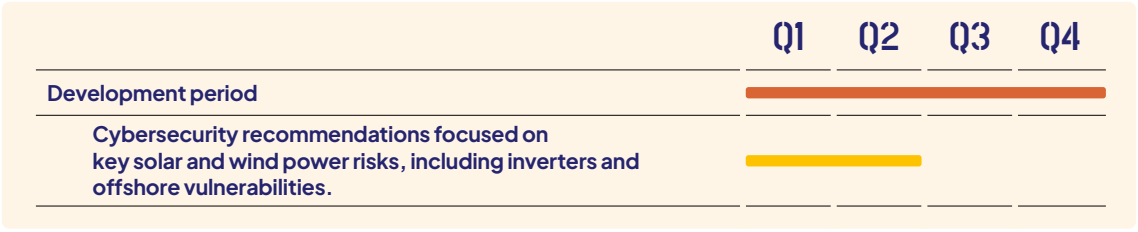
Voltage management has become an increasingly important focus area due to the significant growth of distributed generation. In this context, implementing the RfG allows this generation to actively support system voltage control, making it essential to establish a framework for effectively leveraging these capabilities. In addition, DSOs will gain enhanced voltage-control capabilities in their networks through future local services. In this context, TSO–DSO cooperation will help achieve optimal voltage management across the system.



4.2 Vulnerability of Wind and Solar to Cyberattacks

Area: Security & Resilience

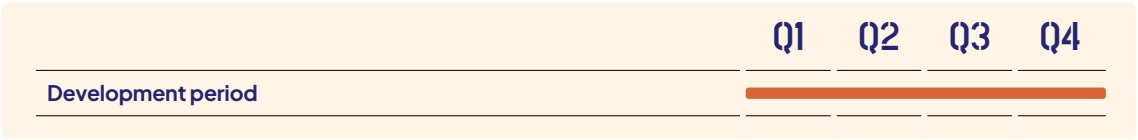
The increasing digitalisation and decentralisation of the power grid, driven largely by solar and wind integration, introduce significant cybersecurity vulnerabilities. A growing number of distributed renewable energy assets are connected to DSO grids. TSO–DSO coordination ensures comprehensive risk mitigation across all voltage levels, enhances system-wide resilience, while also promoting coordinated response mechanisms and shared situational awareness across the grid. The activity focuses on the exchange of information and alignment of perspectives between TSOs and DSOs.



4.3 Exchanges on Security and Resilience

Area: Security & Resilience

The security and resilience of the electricity system are critical for TSO and DSO work plans because they directly impact the reliability and stability of the power supply. As the energy system becomes more decentralised and integrates higher shares of renewable and digital technologies, new challenges emerge, such as increased hybrid threats, variability in generation, and the need for real-time coordination. Incorporating security and resilience into the TSO–DSO work plan ensures that both operators can proactively manage risks, maintain grid reliability, and support the broader goals of the energy transition.



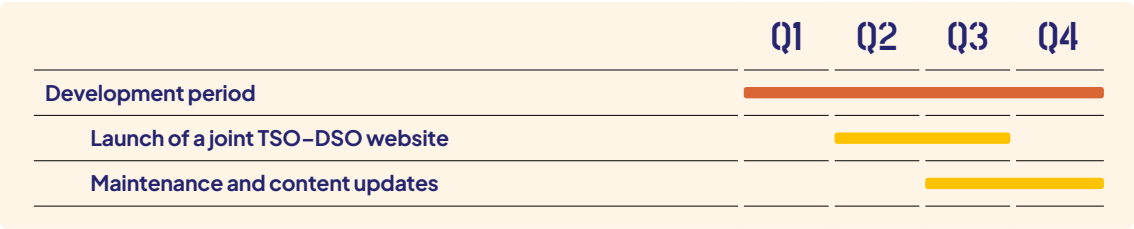
Enablers for Institutional Collaboration

Efficient collaboration between the two Associations is facilitated by horizontal institutional frameworks, which ensure clear organisational structures that support the initiation of new workstreams, accelerate the development of important joint activities, and improve the transparency and visibility of the collaboration.

5.1 Joint TSO–DSO Website

Area: Institutional Cooperation

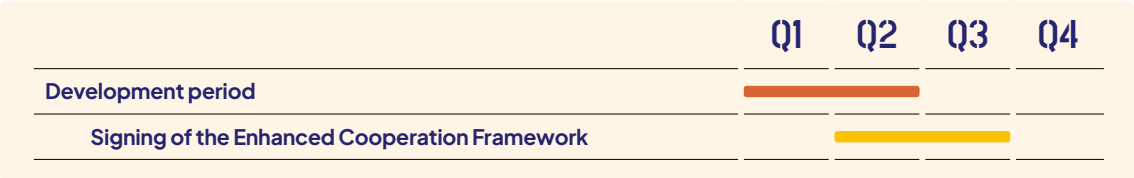
The joint website between ENTSO-E and DSO Entity ("**joint TSO–DSO website**") will serve as a central platform supporting the collaboration between the two Associations, enabling the development, hosting, and communication of shared initiatives. This joint TSO–DSO website will host all new common IT platforms, such as Capacitypedia and future versions of Technopedia, and will provide clear and structured information on all joint activities. It will accelerate the development of joint work and enhance stakeholder visibility of collaboration between the Associations.



5.2 Enhanced Cooperation Framework

Area: Institutional Cooperation

Since signing the MoU on 11 January 2022, ENTSO-E and EU DSO Entity have expanded their collaboration beyond Network Codes and Guidelines to include developing joint TCMs and reports, building common IT platforms (Technopedia, Capacitypedia, JWG Repository), advising the EC on data interoperability and access, and coordinating communication on EU energy initiatives. Recognising this need, ENTSO-E and DSO Entity are working to establish an enhanced cooperation framework ("**Enhanced Cooperation Framework**") that better reflects the scope and strategic importance of the partnership and ensures its continued effectiveness. This Enhanced Cooperation Framework will consist of an updated MoU and a Cooperation Agreement on Joint Website and Common IT Platforms.



5.3 Joint Communication on Main Policy Topics

Area: Institutional Cooperation

ENTSO-E and DSO Entity intend to assess opportunities for coordinated communications on key policy topics of mutual interest.

	Q1	Q2	Q3	Q4
Development period				

5.4 Common Events

Area: Institutional Cooperation

The Associations will explore opportunities to conduct knowledge-sharing events like webinars, seminars, conferences, and workshops to facilitate improved understanding of each other's operations, challenges, and potential for coordination.

	Q1	Q2	Q3	Q4
Development period				

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