



ANNUAL WORK PROGRAMME

2027

TABLE OF CONTENTS

1	INTRODUCTION.....	4
2	SUMMARY OF ENTSOG's ACTIVITIES IN 2027	7
2.1	Network Codes and Guidelines	8
2.2	Scenarios and Infrastructure	9
2.3	Security of Supply	10
2.4	Energy Transition.....	11
3	NETWORK CODES AND GUIDELINES	13
3.1	Capacity Allocation Mechanisms Network Code.....	14
3.2	Balancing Network Code	16
3.3	Tariff Network Code	17
3.4	Interoperability and Data Exchange Network Code	20
3.5	Congestion Management Procedures Guidelines	25
3.6	Transparency requirements and REMIT	26
3.7	Functionality Process.....	30
3.8	Supporting Activities.....	30
3.9	Future Network Code Development and Market Analysis.....	31
4	SCENARIOS AND INFRASTRUCTURE	33
4.1	Objectives.....	34
4.2	Key Deliverables and Activities.....	34
4.3	Supporting Activities.....	36
4.4	Programme of Activities	37
5	SECURITY OF SUPPLY	39
5.1	Objectives.....	39
5.2	Key Deliverables and Activities.....	40
5.3	Supporting Activities.....	44
5.4	Programme of Activities	45
6	ENERGY TRANSITION	47
6.1	Objectives.....	50
6.2	Key Activities and Deliverables	50
6.3	Report on annual renewable and low-carbon gas injections into gas networks	51
6.4	Programme of Activities	51
7	RESEARCH AND DEVELOPMENT	53
7.1	Objectives.....	53
7.2	Key Deliverables and Activities.....	53
7.3	Programme of Activities	55
8	ENTSOG SUPPORTING ACTIVITIES	57
8.1	Objectives.....	57
8.2	Key Deliverables and Activities.....	57
9	ANNEX: OVERVIEW OF ENTSOG'S REGULATORY FRAMEWORK FOR ITS TASKS.....	63
10	ABBREVIATIONS	66
11	IMPRINT	67



1 INTRODUCTION

ENTSOG was established in December 2009 as part of the European Union's Third Energy Package. Since then, ENTSOG has been entrusted with a range of tasks under EU legislation to support the functioning of the internal gas markets, security of supply, and the achievement of the EU's energy and climate objectives. In line with Art. 26(3)(e) of Regulation (EU) 2024/1789, this document presents the Annual Work Programme (AWP) for 2027, outlining ENTSOG's planned activities and deliverables for the year.

ENTSOG's main responsibilities include the development of Network Codes (NCs) and Guidelines (GLs), the preparation of the Union-wide Ten-Year Network Development Plan (TYNDP), and the assessment of European security of gas supply through regular Summer and Winter Outlooks and Reviews. The regulatory framework has evolved to reflect the progressive decarbonisation of the gas sector and the emergence of dedicated hydrogen infrastructure- ENTSOG's tasks now reflect this.

In this context, and as of 1 January 2027, ENTSOG's TYNDP responsibilities focus on natural gas infrastructure only, including an EU outlook on supply adequacy of the European natural gas network and monitoring of progress in the production of sustainable biomethane. Hydrogen-specific planning and cost-benefit analysis activities will be undertaken separately by the European Network of Network Operators for Hydrogen (ENNOH). Joint grid planning will continue with ENTSO-E to include the electricity interlinkages, as has taken place during the previous TYNDP scenario development.

ENTSOG continues to play a central role in the development, implementation support, and monitoring of NCs and GLs, as well as any formal regulatory amendment processes initiated by the European Commission (EC). Activities related to interoperability, data exchange, transparency requirements, and REMIT remain a key pillar of ENTSOG's work

Assessment of adequacy of gas infrastructure to enable security of supply remains a fundamental ENTSOG priority in 2027. ENTSOG will continue to publish seasonal Supply Outlooks and Reviews and support the functioning of the Regional Coordination (ReCo) System for Gas System. The ReCo System for Gas facilitates enhanced regional cooperation, preparedness measures, and solidarity mechanisms, as well as strengthened cooperation with the non-EU transmission system operators of the Energy Community, contributing to overall European supply security.



In addition, part of ENTSOG's work in 2027 originates from key European regulatory fora in 2026. The European Gas Regulatory Forum in Madrid welcomed ENTSOG's proposal to develop a mid-term European gas adequacy assessment framework, focusing on the role of gas infrastructure in providing flexibility and supporting security of supply within an increasingly integrated energy system.

Furthermore, the 12th Energy Infrastructure Forum in Copenhagen acknowledged the joint ENNOH/ENTSOG work on de-risking options for hydrogen infrastructure investments and reiterated its support for continued structured exchange on this topic, with a view to identifying practical solutions and potential implementation pathways to facilitate the development of cross-border hydrogen infrastructure.

In parallel, ENTSOG continues monitoring and reporting on renewable and low-carbon gas injections, including biomethane. ENTSOG will support engagement on developments related to

gas quality and interoperability, hosting an annual workshop with stakeholders in 2027. ENTSOG will also further contribute to the assessment of infrastructure repurposing, the integration of clean molecules into the gas grid, and the development of coordinated approaches to CO₂ market and transport infrastructure, in line with emerging EU policy initiatives.

Within a changing EU policy and legislative landscape, including discussions linked to the EU Grids Package and a potential revision to the TEN-E Regulation, ENTSOG will continue to provide coordinated technical input on issues related to gas infrastructure planning, efficient use and repurposing of existing assets, and energy system integration, in line with its mandate.

Building on its established role and expertise, ENTSOG will carry forward its contribution to European gas transmission discussions, providing clarity and technical grounding as the regulatory and network reality continue to evolve.



2 SUMMARY OF ENTSOG's ACTIVITIES IN 2027

ENTSOG's main activities can be described using the following four headings:

- ▲ **Networks Codes and Guidelines (Section 3)**
- ▲ **Scenarios and Infrastructure (Section 4)**
- ▲ **Security of Supply (Section 5)**
- ▲ **Energy Transition (Section 6)**

The AWP reflects the regulatory tasks assigned to ENTSOG under Regulation (EU) 2024/1789, including the development and implementation of NCs and GLs, which remain a cornerstone of the organisation's activities. ENTSOG efforts for 2027 continue monitoring the implementation and effects of the established NCs and GLs and elaborating any NCs requested by the EC – these are addressed in Section 3 of this document. The joint activity of managing the Functionality Process with ACER and Transparency Guidelines (including on the Regulation on Wholesale Energy Market Integrity and Transparency, or "REMIT") is also included in Section 3.

Other regulatory tasks include the elaboration of the Ten-Year Network Development Plan (TYNDP), providing regular information on gas supply and demand for the European market and delivering common operational tools to ensure network security and reliability, as needed.

These are described in Sections 4 and 5. Section 6 outlines ENTSOG's decarbonisation efforts to address the climate targets and describe how the gas grid can facilitate the transport of gases accelerating the energy transition, including biomethane and CO₂, and the role of the gas grid in facilitating the integration of these energy carriers.

Research and Development activities undertaken by ENTSOG are described in Section 7. Details on ENTSOG's internal supporting organisation are provided in Sections 8 of this document.

Each topic in Section 3–7 includes objectives, key deliverables and activities and a programme of activities for 2027. ENTSOG's key work areas and deliverables are highlighted in Sections 2.1 to 2.5 below and summarised in the "Programme of Activities" tables in each section.

A summary of regulatory references is included in the Annex – Section 9.

2.1 NETWORK CODES AND GUIDELINES

In 2027, ENTSOG will continue to provide support to its Members and other market participants on NC and Guidelines-related topics and will maintain its monitoring activities. ENTSOG will continue working with ACER in providing joint solutions to issues resulting from the Functionality Process¹. On the basis of legislation, for example Directive (EU) 2024/1788 and Regulation (EU) 2024/1789 – as well as amendments to existing NCs and GLs, ENTSOG will support the EC and ACER as required.

Market-related activities in 2027 will focus on supporting and monitoring the Balancing NC, Capacity Allocation Mechanisms NC, Congestion Management Procedure Guidelines and the Tariff NC. These activities will continue to support transparent, efficient and well-functioning cross-border gas markets across the Union.

Interoperability work in 2027 includes the development, support, and maintenance of Common Network Operation Tools (CNOTs) for data exchange. ENTSOG will continue to work in close cooperation with ACER, the EC, Energy Community Secretariat, EASEE-gas and other stakeholders on all matters relating to NC and Guidelines.

Activities undertaken under the Transparency Guidelines, NCs and REMIT frameworks relate mainly to the management of transparency and reporting obligations including TSOs' publications

on their websites, on the ENTSOG Transparency Platform (TP), as well as data reporting to ACER REMIT Information System (ARIS). In 2027, ENTSOG and the gas TSOs will continue implementation of the new reporting requirements and associated compliance activities in line with the revision of the REMIT Implementing Regulation on data reporting and the new Delegating Regulation on the authorisation and supervision of inside information platforms and registered reporting mechanisms, adopted on 9 April 2026. For the ENTSOG TP, stakeholder feedback will continue to be analysed, where functionalities and enhancements will be further developed and introduced to improve the usability and user-friendliness of the platform. ENTSOG and the TSO members will continue efforts to improve data quality through maintaining a high level of data completeness and the fulfilment of their REMIT obligations.

1 <https://www.acer.europa.eu/gas/network-codes/functionality-platform>

Picture courtesy of GAZ-SYSTEM



2.2 SCENARIOS AND INFRASTRUCTURE

In 2027, ENTSOG will continue work on the TYNDP 2026. Following the publication of the Hydrogen Infrastructure Gaps Identification (IGI) and Natural Gas System Assessment (SA) reports that followed an extensive stakeholder consultation at the end of 2026, ENTSOG will continue the TYNDP 2026 process with the formal submission to ACER, EC and Member States.

Following the submission of IGI and TYNDP 2026, ENTSOG will start Project-Specific Cost-Benefit Analysis of projects groups applying to the third PCI/PMI process under hydrogen infrastructure categories as per TEN-E Regulation (EU/2022/869), followed by the assessment of electrolyser projects.

In 2027, ENTSOG will continue its work on the TYNDP 2028 Scenarios with ENTSO-E along with ENNOH. This will be the fifth joint Scenarios process with ENTSO-E and the first cycle with ENNOH. In Q1 2027, methodologies and assumptions are foreseen to be finalised and will be consulted in Q2 2027.

In Q2 2027, ENTSOG will commence the TYNDP 2028 process for natural gas infrastructure as required by Art. 32 of Regulation (EU) 2024/1789. TYNDP 2028 activities will begin with the preparation of the processes related to project data collection.

The Gas Quality Outlook is planned to be publicly consulted at the end of 2026, ahead of submission for opinion/approval of ACER, the EC and Member States.

The TYNDP 2028 Scenario Package is also due to be delivered in Q4 2027, as requested under ACER's Framework Guidelines.

During 2027, ENTSOG will work to adapt ENTSO-E's and ENTSOG's consistent and Interlinked Model (ILM) for future TYNDPs. The process will be expanded to include ENNOH involvement.

As outlined in Regulation (EU) 2024/1789, ENTSOG will continue to support the European ENNOH in hydrogen-related TYNDP 2028 tasks, building on handover process initiated in 2026.



2.3 SECURITY OF SUPPLY

ENTSOG continues its assessment of the European security of supply, through preparation of several deliverables in 2027: ENTSOG will publish the Summer Supply Outlook 2027 with Winter 2027/28 Overview, as well as the Summer 2026 Review. ENTSOG will also publish the Winter Supply Outlook 2027/28 with Summer 2028 Overview, along with the Winter 2026/27 Review.

ENTSOG will undertake work on facilitating the existing Regional Coordination (ReCo) System for Gas as a CNOT for emergency conditions and maintain the common incidents classification scale. ReCo Team Europe, an operational group of gas TSOs established under the ReCo System for Gas, will continue its 24/7 exchange platform and coordinating work to help address security of supply challenges in Europe. ENTSOG will continue to support the EC and the Gas Coordination Group (GCG) in implementing security of supply measures, developing adjustments and new documentation, in particular by assisting, if requested, in preparing and implementing solidarity principles, regional emergency plans, preventative action plans, and storage filling level targets. Further work is also expected in assisting the Energy Community Secretariat and Contracting Parties in security of supply activities, e. g., SEEGAS steering committee and others.

ENTSOG will monitor the use of ReCo System for Gas as the CNOT for emergency conditions, along with the evolution of operational processes and needs and will revise it if needed, as required by Regulation (EU) 2024/1789.

Since most EU Member States import natural gas from non-EU countries and most of those imports originates from, or crosses, third countries to the

EU, ENTSOG will further strengthen the cooperation between EU TSOs and third-country TSOs that play an important role in EU gas supplies and contribute to the preparedness for emergencies.

ENTSOG will continue to support the EC, Gas Coordination Group (GCG), and Member States in any future revision and implementation of the EU energy security framework and of the Security of Supply Regulation. As the energy landscape evolves, ensuring a resilient and coordinated approach to gas supply remains a key priority. ENTSOG will contribute technical expertise, data, and network modelling capabilities to support the development of effective measures and the enhancement of regional cooperation.

In parallel, ENTSOG will closely follow the implementation of Regulation (EU) 2026/261 on phasing out Russian natural gas imports. ENTSOG will provide any analytical support, scenario assessments, and targeted recommendations. This work will aim to identify infrastructure requirements and support system adaptability under various supply configurations.

ENTSOG will continue supporting the EC and other stakeholders in the context of the changes as a consequence of the Russian war against Ukraine and any other impacting geopolitical situations.

2.4 ENERGY TRANSITION

In 2027, ENTSOG will continue to contribute to the objectives of the European decarbonisation goals and clean industrial agenda, with a special focus on transporting clean molecules such as biomethane, and repurposing existing gas grids for renewable and low-carbon hydrogen. Furthermore, ENTSOG will continue its work to assess the implications for CO₂ transport, infrastructure and storage, especially in the context of the CO₂ Markets and Infrastructure package. ENTSOG will also focus on supporting the TSO Members in their implementation of key regulatory files that are aimed at addressing climate objectives, including: revision of the TEN-E Regulation and options for clean molecules integration infrastructure (including biomethane); the proposed CO₂ regulatory package; and consideration of the impact of repurposing existing gas infrastructure on security of supply, and within the forthcoming Energy Security Framework. This work takes place in the context of an energy grids system that will become progressively more electrified, with increasing volumes of hydrogen transport, relying also on gas infrastructure to enable inclusion of clean molecules.

ENTSOG will continue to undertake its decarbonisation tasks as required by the Hydrogen and Decarbonised Gas Market Package (Regulation (EU) 2024/1789) and other relevant regulatory frameworks as outlined in the Annex of the AWP. For example, the above regulation mandates ENTSOG to publish an annual report to include the quantity of renewable gas and low-carbon gas injected into the natural gas system – the third edition will be published in 2027.

Additionally, the EU Fora in 2026 require work to be undertaken by ENTSOG in 2027 for further assessment of decarbonisation opportunities. The conclusions of the 40th European Gas Regulatory Forum in Madrid welcomed ENTSOG's presentation on a mid-term gas adequacy assessment, which would enable an investigation of adequacy between supply and demand in the context of gas grid and the actual status of the energy transition, covering a time span of ten years.

At the 12th Energy Infrastructure Forum in Copenhagen, participants welcomed the joint report of ENNOH and ENTSOG on derisking Europe's future hydrogen infrastructure, including the concept of an EU guarantee. Forum participants invited a continued structured exchange in order to explore further potential solutions to de-risking cross-border hydrogen infrastructure and towards a possible implementation roadmap to support the ramp-up of hydrogen networks, with consideration of value added and a system perspective.

On relevant topics, ENTSOG will consider initiatives and proposals published by the EC, ACER or other stakeholders, and will liaise internally with different working groups and task forces. ENTSOG's Advisory Panel for Future Gas Grids will continue in 2027, allowing for open stakeholder exchange on key energy transition topics.



3 NETWORK CODES AND GUIDELINES

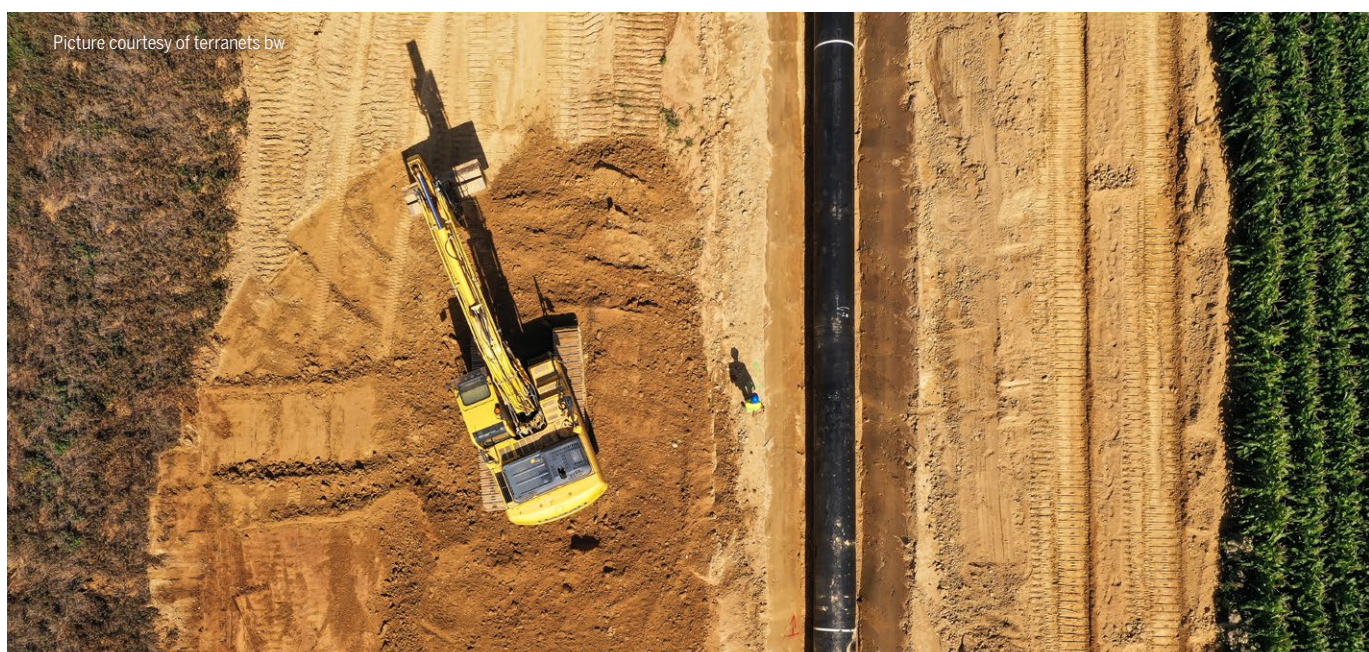
Regulation (EC) No 715/2009 required European-wide NCs and GLs to be developed by ENTSOG to harmonise the applicable rules aimed at facilitating market integration.

On that basis, ENTSOG has developed several NCs and GLs and was required to monitor their implementation and their effect on the harmonisation of applicable rules aimed at facilitating market integration and transparency. Under Directive (EU) 2024/1788 and Regulation (EU) 2024/1789, this requirement will continue in 2027 and beyond.

With respect to transparency, the first specific obligations for gas TSOs have been introduced under Regulation (EC) No. 715/2009, which established the basic transparency rules further detailed in Chapter 3 of Annex I and its subsequent amendments. Regulation (EU) 2024/1789 has extended these provisions with additional gas quality-related publication requirements. Reporting obligations have been added in accordance with the REMIT Regulation (EU) No 1227/2011, as amended by Regulation 2024/1106, including the EC's Implementing Regulation (EU) No 1348/2014, repealed in 2026 by EC Implementing Regulation (EU) 2026/256, and complemented by EC Delegated Regulation (EU) 2026/255. ENTSOG and the TSO members will continue to address these requirements and implement necessary updates.

ENTSOG will also continue to actively participate in the further development of NCs and GLs through the Functionality Process, any formal regulatory amendment process and any tasks assigned via new legislation. In this regard, new or updated NCs are expected to be developed as a result of Directive (EU) 2024/1788 and Regulation (EU) 2024/1789.

In accordance with Art. 70(2)(d) of Regulation (EU) 2024/1789, NCs and GLs shall apply *“to all interconnection points within the Union and entry points from and exit points to third countries from 5 August 2026.”* However, Art. 70(3) allowed National Regulatory Authorities (NRAs) to submit a request to the EC and ACER by 5 February 2026 in view of a temporary derogation from the application of NCs and GLs at points with third countries. In May 2026, ACER provided its reasoned opinion to the EC on six derogation requests, as required under Art. 70(3) of the Regulation. The EC will adopt a decision on these requests after considering ACER opinions. In 2027, ENTSOG will support relevant stakeholders in the ongoing implementation of this process and any optional derogations from it.



Picture courtesy of terranets bv

3.1 CAPACITY ALLOCATION MECHANISMS NETWORK CODE

CAM NC (EC Regulation (EU) 2017/459) sets up capacity allocation mechanisms for existing and incremental capacity and how adjacent TSOs cooperate to facilitate capacity sales, having regard to general commercial as well as technical rules related to capacity allocation mechanisms.

The amended CAM NC entered into force as Regulation (EU) 2017/459 on 6 April 2017 and repealed the previous Regulation (EU) No. 984/2013. In 2027, ENTSOG will continue to support the implementation of the CAM NC by providing TSO members and stakeholders with advice and guidance throughout the implementation process, as well as to engage in any activities

related to amendments to the CAM NC as required by Directive (EU) 2024/1788 and Regulation (EU) 2024/1789. The official legislative procedure for amendment of the CAM NC is expected to be finalised in 2026. ENTSOG will support relevant stakeholders in the implementation of the revised CAM NC.

3.1.1 OBJECTIVES

- ▲ To analyse and assess the impact of the revised CAM NC for TSOs.
- ▲ Set up the framework for the new responsibilities that ENTSOG has in the revised CAM NC.
- ▲ To develop documents/solutions stemming from legal obligations on ENTSOG outlined in the CAM NC (including the auction calendar published every year).
- ▲ To support the implementation and application of the revised CAM NC.
- ▲ To monitor and analyse the implementation of the CAM NC and its effect on the harmonisation of applicable rules aimed at easing market integration.
- ▲ To monitor the incremental capacity process according to Chapter V of the CAM NC and provide support to members throughout the different steps of this process.
- ▲ To facilitate activities and provide expert knowledge and guidance to stakeholders related to capacity.
- ▲ To respond to CAM NC-related issues raised via the Functionality Process, working in close dialogue with stakeholders.
- ▲ To support and assist in the implementation of the CAM NC in terms of regulatory interpretation by relevant EU bodies as well as via knowledge sharing and the dissemination of good practices, including assistance to the Energy Community and other third countries in implementing the CAM NC.
- ▲ To support any amendment processes to CAM NC.



Picture courtesy of bayernets

3.1.2 KEY ACTIVITIES AND DELIVERABLES

- ▲ Publish the 2026 CAM NC monitoring report in 2027.
- ▲ Support the amendment process of CAM NC and offer expertise to ACER and EC and if applicable, ENTSOG will support the revision of the CAM NC and its implementation.
- ▲ Where necessary in 2027, support implementation of CAM-related aspects of Directive (EU) 2024/1788 and Regulation (EU) 2024/1789.
- ▲ Publish the yearly CAM NC Auction Calendar.
- ▲ Issue solutions delivery from the joint ACER and ENTSOG functionality process involving stakeholders.
- ▲ Revise and update the Business Requirements Specification (BRS) CAM in alignment with the revised CAM NC.
- ▲ Monitor the progress of the incremental capacity process and support members throughout the different steps of this process, if required.
- ▲ Develop ENTSOG positions on capacity-related issues, including responses to public consultations and ACER reports.

3.1.3 PROGRAMME OF ACTIVITIES

The following table shows the expected timeline and key activities on CAM NC related issues:

CAM NC	2027											
	J	F	M	A	M	J	J	A	S	O	N	D
CAM NC auction calendar												
Prepare for the 2026 CAM NC monitoring report, to be published in 2027												
Support and assistance to TSOs in the implementation of the CAM NC												
Incremental Capacity Process – support TSOs with the incremental capacity process												
Analysis of ACER reports and other capacity-relevant reports												
Monitor the activities and develop ENTSOG positions on capacity-relevant issues, incl. responses to public consultations												
Support the Energy Community in implementing the CAM NC												
Functionality Process for the CAM NC												
CAM BRS update (expected)												

■ Activity periods
 ■ Key deliverables available to external stakeholders
 ■ Undetermined workload

3.2 BALANCING NETWORK CODE

The BAL NC (EC Regulation (EU) 2017/459) applies to balancing zones within the borders of the EU. It establishes rules for natural gas balancing, including network-related rules on nomination procedures, imbalance charges, settlement processes associated with daily imbalance charges, and provisions on operational balancing.

The BAL NC was published in the Official Journal of the European Union on 26 March 2014 and entered into force on 16 April 2014.

In 2027, ENTSOG will continue to support the implementation of the BAL NC by providing members and stakeholders with advice and guidance throughout the implementation process and any other related topics.

3.2.1 OBJECTIVES

- ▲ To support the implementation and application of the BAL NC.
- ▲ To monitor and analyse the implementation of the BAL NC and its effect on the harmonisation of applicable rules aimed at easing market integration.
- ▲ To facilitate activities and provide expert knowledge and guidance to stakeholders related to balancing.
- ▲ To respond to BAL NC-related issues raised via the Functionality Process, working in close dialogue with stakeholders.
- ▲ To support and assist in the implementation of the BAL NC in terms of regulatory interpretation by relevant EU bodies as well as via knowledge sharing and the dissemination of good practices, including assistance to the Energy Community and other third countries in implementing the BAL NC.
- ▲ To coordinate with ACER on data exchange and information sharing to monitor the effective implementation of the BAL NC.

3.2.2 KEY ACTIVITIES AND DELIVERABLES

- ▲ Prepare for the 2026 – 2027 BAL NC Implementation and Effect Monitoring Report to be published in 2028 and start the data collection.
- ▲ Data collection for ACER's annual Gas Balancing Dashboard.
- ▲ Where necessary in 2027, support implementation and discuss developments on BAL-related aspects of Directive (EU) 2024/1788 and Regulation (EU) 2024/1789.
- ▲ Issue solutions delivery from the joint ACER and ENTSOG functionality process involving stakeholders on balancing-related issues.
- ▲ Update the Business Requirements Specification (BRS) for balancing processes if required.
- ▲ Develop ENTSOG positions on balancing-related issues, including responses to public consultations and ACER reports.

3.2.3 PROGRAMME OF ACTIVITIES

The following table shows the expected timeline and key activities on BAL NC related issues:

Balancing NC	2027											
	J	F	M	A	M	J	J	A	S	O	N	D
Prepare in 2027 for the BAL NC monitoring report to be published in 2028												
Support and assistance to TSOs in the implementation of the BAL NC												
Data collection and analysis for ACER's Gas Balancing Dashboard												
Where necessary in 2027, support potential amendments and discuss developments on BAL NC as a result of Directive (EU) 2024/1788 and Regulation (EU) 2024/1789												
Analyses of ACER reports (implementation/effect monitoring, market monitoring) and other BAL-relevant reports												
Monitor activities and develop ENTSOG positions on balancing-relevant issues, incl. responses to public consultations and ACER reports												
Support the Energy Community in implementing the BAL NC												
Functionality Process for the BAL NC												

■ Activity periods
 ■ Key deliverables available to external stakeholders
 ■ Undetermined workload

3.3 TARIFF NETWORK CODE

The TAR NC (EC Regulation (EU) 2017/460) contributes to set tariffs, or methodologies used to calculate them (which are transparent), considering the need for system integrity and its improvement, reflecting the actual cost incurred, using a non-discriminatory approach, facilitating efficient gas trade and competition, avoiding cross-subsidies between network users, and providing incentives for investment.

The TAR NC on rules regarding harmonised transmission tariff structures for gas was published in the Official Journal of the European Union on 17 March 2017 and entered into force on the 6 April 2017.

In 2027, ENTSOG will continue to support the ongoing implementation and monitoring of the TAR NC by providing TSO members and stakeholders with advice and guidance throughout the implementation process.

As there are several provisions in Directive (EU) 2024/1788 and Regulation (EU) 2024/1789 regarding tariffs, ENTSOG will also support the implementation process of these provisions.

In particular:

- Art. 17 of Regulation (EU) 2024/1789 clarifies that, from 1 January 2026, NRAs “may apply a discount of up to 100 % to capacity-based transmission and distribution tariffs at entry points from, and exit points to, underground natural gas storage facilities and at entry points from LNG facilities for the purpose of increasing security of supply.” This is compatible with existing discount provisions in Art. 9 of the TAR NC, since the TAR NC states that a default discount of at least 50 % must apply at TSOs’ points with storage and that a discount may be applied at TSOs’ points with LNG terminals.

- ▲ Art. 18 of Regulation (EU) 2024/1789 sets out discounts for renewable and low-carbon gases at “entry points from renewable gas and low-carbon gas production facilities”, at “capacity-based transmission tariffs at entry points from and exit points to natural gas storage facilities, unless such a storage facility is connected to more than one transmission or distribution network and is used to compete with an interconnection point”, and “at interconnection points between Member States”. At least partial derogations may be granted under conditions. In recent months, several NRAs in several MSs granted such partial or full derogations from application of Art. 18.
- ▲ Art. 19 of Regulation (EU) 2024/1789 establishes several provisions:

 - from 5 August 2025, an obligation for NRAs to “ensure the transparency of the methodologies, parameters and values used to determine allowed or target revenue of transmission system operators”, based on information items listed in Annex I paragraph 1 of the Regulation. Such items include tariff-related information and expand transparency provisions already present in the TAR NC.
 - an obligation for ACER to complete a TSO efficiency comparison which should be first published “by 5 August 2027 and every four years thereafter”. ENTSG is supporting this exercise by drawing on the operational expertise of its members, facilitating the coordination and content discussions between TSOs and ACER.
 - a requirement that NRAs “assess the long-term evolution of transmission tariffs”, based on expected evolutions of regulated revenues and gas demand, until the end of the regulatory period and – where available – until 2050.

The published conclusions of the 40th meeting of the European Gas Regulatory Forum (Madrid Forum) in April 2026 refer to gas TSO tariffs, indicating a possible reopening of the TAR NC: “The Forum recognizes the importance of predictable transmission tariffs in rapidly evolving markets, and it acknowledges the role that the EU harmonised tariff framework has in contributing to this objective. At the same time, it calls for further improvements taking into account the broader perspective of infrastructure costs and utilisation rates. The Forums [sic] **invites the Commission to start assessing the need and the scope for the potential revision of the TAR NC.**” If the EC proposes to revise the TAR NC, ENTSG will reflect it in its work programme in the coming years.



Picture courtesy of TAP

3.3.1 OBJECTIVES

- ▲ To support the implementation and application of the TAR NC.
- ▲ To monitor and analyse the implementation of the TAR NC and its effect on the harmonisation of applicable rules aimed at easing market integration.
- ▲ To facilitate activities and provide expert knowledge and guidance to stakeholders related to tariffs.
- ▲ To respond to TAR NC-related issues raised via the Functionality Process, working in close dialogue with stakeholders.
- ▲ To support and assist in the implementation of the TAR NC in terms of regulatory interpretation by relevant EU bodies as well as via knowledge sharing and the dissemination of good practices, including assistance to the Energy Community and other third countries in implementing the TAR NC.
- ▲ To develop documents/solutions stemming from legal obligations for ENTSG outlined in the TAR NC (for example, regarding transparency requirements).

3.3.2 KEY ACTIVITIES AND DELIVERABLES

- ▲ Prepare for the TAR NC Implementation and Effect Monitoring Report to be published in 2028 and start data collection.
- ▲ Where necessary in 2027, support implementation and discuss developments on tariff-related aspects of Directive (EU) 2024/1788 and Regulation (EU) 2024/1789.
- ▲ Issue solutions delivery from the joint ACER and ENTSG functionality process involving stakeholders.
- ▲ Develop ENTSG positions on tariff-related issues, including responses to public consultations and ACER reports.
- ▲ It should be noted that with the additional task of the ACER efficiency comparison there may be significant work for the ENTSG team to support ACER and TSOs in addition to ENTSG's core deliverables, as it has been in 2026.

3.3.3 PROGRAMME OF ACTIVITIES

The following table shows the expected timeline and key activities on Tariff NC related issues:

Tariff NC	2027											
	J	F	M	A	M	J	J	A	S	O	N	D
Prepare in 2027 for the TAR NC monitoring report to be published in 2028												
Support and assistance to TSOs in the implementation of the TAR NC												
Where necessary in 2027, support potential amendments and discuss developments on TAR NC as a result of Directive (EU) 2024/1788 and Regulation (EU) 2024/1789												
Analyses of ACER reports (implementation/effect monitoring, allowed/target revenue, market monitoring) and other TAR-relevant reports												
Monitor the activities and develop ENTSG positions on tariff-relevant issues, incl. responses to public consultations												
Support the Energy Community in implementing the TAR NC												
Functionality Process for the TAR NC												

■ Activity periods

■ Key deliverables available to external stakeholders

■ Undetermined workload

3.4 INTEROPERABILITY AND DATA EXCHANGE NETWORK CODE

Regulation (EU) 2015/703 established a NC on interoperability and data exchange rules (INT NC) in 2015.

An appropriate degree of harmonisation in technical, operational and communication areas is key to overcome potential barriers to the free flow of gas in the European Union. The INT NC enables the necessary harmonisation in those areas, therefore leading to effective market integration. For that purpose and for facilitating cooperation between adjacent transmission system operators, ENTSOG provides assistance for the harmonised implementation of the INT NC and develops and maintains CNOTs for the technical implementation of NCs and GLs.

In the context of an evolving regulatory framework, the European Gas Regulatory Forum in Madrid in 2025 invited ACER to assess the need for a potential revision of the INT NC. In response, ACER launched a public consultation in 2026 to gather market feedback on whether a revision of the INT NC is warranted.

In 2027, ENTSOG will remain ready to contribute to any subsequent steps, should the EC, based on ACER's assessment, decide to initiate a revision process.

At the same time, based on experience gained from the implementation of the INT NC and the outcomes of ENTSOG's monitoring and review activities, the current framework is considered by ENTSOG and its members TSOs to be broadly fit for purpose and to provide a stable basis for cross-border cooperation.

Where appropriate, ENTSOG will continue to support targeted improvements, in particular for issues assessed through the Functionality Process and reflected in solution notes, ensuring that any potential adjustments remain proportionate and focused on identified operational needs.

3.4.1 OBJECTIVES

- ▲ To support the implementation and application of technical, operational and communication harmonised rules.
- ▲ To investigate the further steps of harmonisation regarding common data exchange solutions.
- ▲ To facilitate and support coordination of technical cooperation between Member States, Energy Community and third-country transmission system operators, as required by Regulation (EU) 2024/1789.

3.4.2 KEY ACTIVITIES AND DELIVERABLES

3.4.2.1 Monitoring of the implementation and functioning of the Network Code on Interoperability and Data Exchange Rules

- ▲ Assess the need to develop analysis on the implementation of the NC on Interoperability and Data Exchange Rules.
- ▲ Analyse any proposals arising from the Functionality Process including validation, categorisation and prioritisation of the issues and develop proposals for improvement or amendment of the NCs or GLs together with ACER and relevant stakeholders.



Picture courtesy of Fluxys

3.4.2.2 Development, support and maintenance of common network operation tools (CNOTs) for data exchange

- ▲ Monitor the implementation and functionality of published CNOTs for capacity and congestion and nominations and matching procedures, including the related Business Requirement Specifications, Edig@s xml, implementation guidelines and the technical communication profiles.
- ▲ Provide support throughout 2027 for the CNOTs, including delivering an amended version of a given CNOT if required (the CAM NC revision might result in changes to the CAM/CMP BRS that may require completion in 2027).
- ▲ Hold a data exchange and cybersecurity workshop related to the implementation of Common Data Exchange Solutions featuring Data Exchange, Communication and Cybersecurity.
- ▲ Analyse any suitable requests concerning potential Data Exchange harmonisation.
- ▲ Maintain cooperation with ENNOH, EASEE-gas, GIE, eDelivery – the EC's eDelivery Building Block programme, ACER, ENISA, SEEG (Smart Energy Expert Group) and other relevant stakeholders involved in data exchange and cybersecurity and share appropriate and relevant information.

3.4.2.3 Technical cooperation between Member States, Energy Community and third-country transmission system operators

- ▲ If required, update recommendations relating to the coordination of technical cooperation between Member States, Energy Community and third-country transmission system operators.
- ▲ Support the TSOs of Member States, Energy Community and third countries in the implementation of the INT NC rules and expanding regional cooperation.
- ▲ If required, host workshop to discuss future steps for strengthening technical cooperation between Member States, Energy Community and third-country TSOs supplying or transiting gas to the EU.

3.4.2.4 Gas Quality and Hydrogen handling

- ▲ Publish the second edition of the Gas Quality monitoring report as required by Regulation (EU) 2024/1789.
- ▲ Support the implementation of the gas quality transparency requirements as stated in Annex I of Regulation (EU) 2024/1789.
- ▲ Develop the seventh edition of the Gas Quality Outlook in alignment with TYNDP 2026, required by the INT NC, showing the potential variability of some gas quality parameters in Europe within the next ten years.
- ▲ Organise a public workshop on gas quality, hydrogen and CO₂ handling to show the latest advancements in the field of the gas quality and promote the dialogue with stakeholders along the gas value chain.
- ▲ Facilitate information exchange across TSOs and stakeholder on best practices for gas quality management (i. e., oxygen mitigation techniques, deodorisation in reverse flows, Wobbe Index classification system management), together with challenges and possible impacts related to the injection of higher amounts of low carbon and renewable gases into the gas grids.
- ▲ Cooperate with CEN, particularly in:
 - The implementation of the revised standard EN 16726 carried out by CEN TC 234, specifically by developing guiding principles and recommendations for implementing Wobbe Index classes at exit points from transmission networks.
- Supporting the work for the development of hydrogen quality standard in hydrogen networks
- The post revision work of EN 16723 – natural gas and biomethane for use in transport, and biomethane for injection in the natural gas grid, carried out by CEN TC 408.
- ▲ Cooperate with ENNOH, in particular on hydrogen quality, sharing best practices from gas quality handling in transmission networks.
- ▲ Facilitate and monitor the discussions on the potential achievable hydrogen purity levels in repurposed natural gas grids.
- ▲ Undertake activities and share best practices related to the gas transmission network readiness to integrate renewable and low-carbon gases in the natural gas grid, and to transport hydrogen and CO₂.
- ▲ Facilitate the information exchange between TSOs about the best practices on gas quality.
- ▲ Cooperate with associations (e. g., ENNOH, GIE, CEN, GERG, Marcogaz, EASEE-gas) in their activities related to hydrogen, natural gas and renewable and low-carbon gases, and CO₂.

3.4.2.5 Technical Cooperation between TSOs and DSOs

As required by Regulation (EU) 2024/1789, ENTSG published in 2025, recommendations to gas TSOs on their technical cooperation with connected distribution system operators (DSOs). For the development of these recommendations, ENTSG consulted the gas TSOs and four EU associations representing DSOs – Eurogas, CEDEC, GEODE, and GD4S. Several key aspects of technical cooperation between TSOs and DSOs were addressed in the document. This document addresses only TSO-DSO interfaces: recommendations to TSOs on their technical cooperation with hydrogen network operators (HNOs) will be developed at a later date, as currently only a limited number of HNOs exist.

ENTSG, in cooperation with DSO associations, may review these recommendations and, where necessary, update them to reflect changes in the regulatory framework, technical developments, operational practices, and stakeholder requests.

The EU DSO Entity has finalised the extension of its scope to include natural gas and hydrogen DSOs. Both associations will coordinate any activities that may require joint development in 2027.

3.4.2.6 Other Activities

3.4.2.6.1 Operation of the Local Issuing Office for Energy Identification Coding scheme

- Management of EIC Codes requests and updates in the ENTSGO LIO registry and maintaining the EIC data exchange from/to the Central Issuing Office (CIO/ENTSGO-E) and the ENTSGO LIO tool.
- Cooperation with ENTSGO-E to further streamline and standardise the implementation of the scheme in the gas sector.

3.4.2.6.2 Standardisation work for CO₂ transport, infrastructure and storage

- In 2027, ENTSGO will continue to contribute to work focused on the technical aspects of CO₂ transport, infrastructure and storage and to provide expertise on technical aspects. Moreover, ENTSGO will follow and participate in discussion fora for the development of CO₂ composition standards for the transport of CO₂ in pipelines:
- ENTSGO will collaborate with expert groups on CO₂ specifications and standards.
 - ENTSGO will also cooperate with CEN Technical Committees TC 474 for the development of EU standards on Carbon, Capture, Utilisation and Storage (CCUS), more specifically CO₂ quality and CO₂ transport infrastructure.

3.4.2.6.3 Methane Emissions Reduction

- Follow the development on the methane emissions reduction process in Europe and will collaborate with other organisations such as GIE, MARCOGAZ, GERG, CEN and Eurogas.
- If required, provide support to TSOs in the methane emissions reduction activities. This support includes, in particular, activities recommended by the EC/UNEP for methane emissions reporting and targets setting, as well as dissemination of best practices for the detection, quantification and mitigation of methane emissions.
- During the implementation of Regulation (EU) 2024/1787 on methane emissions reduction in the energy sector, ENTSGO will follow the process and will be involved in preparation of feedback and other activities as required (e. g., the development of standards).

3.4.3 PROGRAMME OF ACTIVITIES

The following table shows the expected timeline and key activities on INT NC related issues:

Interoperability and Data Exchange NC	2027											
	J	F	M	A	M	J	J	A	S	O	N	D
Contribute to any subsequent steps following ACER's 2026 public consultation on the need to revise the INT NC, should the EC, based on ACER's assessment, decide to initiate a revision process												
Support and assist TSOs, the Energy Community and stakeholders in the implementation of the INT NC and relevant CNOTs												
Monitor the implementation and functionality of published CNOTs. Update of CNOTs when required												
Functionality Process for the INT NC												
ITC KG Data Exchange and Cybersecurity workshop												
Deliver an analysis or review of potential solutions in data exchange harmonisation if required												
Maintain an Edig@s XML validation tool												

Interoperability and Data Exchange NC	2027											
	J	F	M	A	M	J	J	A	S	O	N	D
Complete CAM/CMP BRS update, if required												
Cooperation with ENISA, EC and other stakeholders on Cybersecurity												
Continue to liaise and promote the adoption/roll-out with stakeholders for the ENTSG AS4 Version 4.0 profile												
Maintain cooperation with ENNOH, EASEE-gas, GIE, EC's eDelivery Building Block) eDelivery, ACER and other relevant stakeholders in the field of data exchange												
Publish the second edition of the gas quality monitoring report as required by Regulation EU 2024/1789												
Support the implementation of the gas quality transparency requirements from TSOs as required by Regulation (EU) 2024/1789												
Develop the seventh edition of the Gas Quality Outlook in alignment with TYNDP 2026, required by the INT Network Code												
Cooperation with stakeholders and associations on gas quality and hydrogen handling												
Cooperation with CEN in standardisation activities for gas and hydrogen quality												
Organise a public workshop on gas quality												
Continue assessment of the maximum achievable hydrogen purity level on repurposed natural gas grids												
Assess the technical challenges of gas quality management and impact of injection of higher amounts of biomethane into gas grids												
Continue to contribute to work focused on the technical aspects of CO ₂ transport, infrastructure and storage												
Cooperation within the "Smart Energy Expert Group" set up by the EC and the two sub-groups: Data exchange & Cybersecurity												
If required, work on recommendations to TSOs on technical cooperation with HNOs as required by Regulation (EU) 2024/1789												
Input into any potential EC discussions on new Cybersecurity requirements for gas												
Management of EIC codes in ENTSG's LIO												
ENTSG – GIE cooperation on the Methane Emissions Regulation implementation process												
Management of EIC codes in ENTSG's LIO												
ENTSG – GIE cooperation on the Methane Emissions Regulation implementation process												

■ Activity periods

■ Key deliverables available to external stakeholders

■ Undetermined workload

3.5 CONGESTION MANAGEMENT PROCEDURES GUIDELINES

The Congestion Management Procedures (CMP) GLs (EC Decision 2012/490/EU) help make available unused capacity with a view to optimal and maximum use of the technical capacity and the timely detection of future congestion and saturation points. They facilitate cross-border exchanges in natural gas on a non-discriminatory basis.

The CMP GLs were developed by the EC in 2010 and 2011 and approved by the EU Gas Committee on 24 August 2012. The implementation date was 1 October 2013. ENTSOG will continue to support the implementation of the CMP GLs in 2027, by

providing TSO members and stakeholders with advice and guidance throughout the implementation process, in particular focusing on potential changes to the CMP GLs arising from Directive (EU) 2024/1788 and Regulation (EU) 2024/1789.

3.5.1 OBJECTIVES

- ▲ To support the implementation and application of the Congestion Management Procedures Guidelines.
- ▲ To monitor and analyse the implementation of the CMP GLs and their effect on the harmonisation of applicable rules aimed at easing market integration.
- ▲ To facilitate activities and provide expert knowledge and guidance to stakeholders related to congestion management.
- ▲ To respond to CMP GLs-related issues raised via the Functionality Process, working in close dialogue with stakeholders.
- ▲ To support and assist in the implementation of the CMP GLs in terms of regulatory interpretation by relevant EU bodies via knowledge sharing and the dissemination of good practices, as well as providing assistance to the Energy Community and other third countries in implementing the CMP GLs.

3.5.2 KEY ACTIVITIES AND DELIVERABLES

- ▲ Publish the 2025–2026 CMP GLs monitoring report in 2027.
- ▲ Where necessary in 2027, support implementation of CMP-related aspects of Directive (EU) 2024/1788 and Regulation (EU) 2024/1789.
- ▲ Issue solutions delivery from the joint ACER and ENTSOG Functionality Process involving stakeholders.
- ▲ Update the Business Requirements Specification (BRS) CMP if required.
- ▲ Analyses of ACER reports (congestion at interconnection points, implementation) and other contractual congestion relevant reports.
- ▲ Develop ENTSOG positions on congestion management-related issues, including responses to public consultations and ACER reports.

3.5.3 PROGRAMME OF ACTIVITIES

The following table shows the expected timeline and key activities on CMP related issues:

CMP Guidelines	2027											
	J	F	M	A	M	J	J	A	S	O	N	D
Support and assistance to TSOs in the implementation of the CMP GLs												
Prepare for the task of the 2025–2026 CMP GLs monitoring report to be published in 2027												
Where necessary in 2027, support potential amendments and discuss developments on CMP GLs as a result of Directive (EU) 2024/1788 and Regulation (EU) 2024/1789												
Analyses of ACER reports (congestion at interconnection points, implementation) and other contractual congestion relevant reports												
Monitor the activities and develop ENTSOG positions on contractual congestion-relevant issues, incl. responses to public consultations												
Functionality Process for the CMP GLs												

■ Activity periods
 ■ Key deliverables available to external stakeholders
 ■ Undetermined workload

3.6 TRANSPARENCY REQUIREMENTS AND REMIT

The liberalisation of the energy market, aimed at securing a well-functioning, open and efficient internal gas market, has significantly transformed the gas transmission business and increased the need for transparency. In this respect, specific obligations for gas TSOs were introduced through Regulation (EC) No 715/2009, which established the fundamental transparency rules, further specified in Chapter 3 of Annex I and its subsequent amendments. Regulation (EU) 2024/1789 included provisions on additional gas quality related publication requirements.

The NCs have been developed to foster harmonisation and promote efficient gas trading and transport across EU gas transmission systems, increasing the scope of data publication requirements.

ENTSOG activities on the transparency encompass the management of transparency obligations, including TSOs' data publications on their websites and the ENTSOG TP, as well as compliance with the Regulation on Energy Market Integrity and Transparency (REMIT).

Regulation (EU) 1227/2011 (REMIT), as amended by Regulation (EU) 2024/1106, including EC Implementing Regulation (EU) No. 1348/2014,

repealed in 2026 by EC Implementing Regulation (EU) 2026/256, introduced additional publication and reporting obligations for market participants, supporting market monitoring and contributing to open and fair competition in wholesale energy markets.

EC Delegated Regulation (EU) 2026/255 introduces new provisions on the authorisation and supervision of Registered Reporting Mechanisms (RRMs) and Inside Information Platforms (IIPs), including processes related to their approval, withdrawal and substitution, entering into force on 29 October 2027.

3.6.1 OBJECTIVES

The objective of ENTSOG's Transparency activities is to enhance the transparency of gas TSOs' operations within the European Union. This is achieved through data published on the Transparency Platform (TP) and the TSOs' websites. The main objectives are to:

- ▲ Further enhance the ENTSOG TP with functionalities improving the usability and user-friendliness of published data, while maintaining cost-efficiency.
- ▲ Monitor, analyse and apply the legal transparency and reporting requirements in EU legislation, including:
 - Hydrogen and Decarbonised Gas Market Package (Regulation (EU) 2024/1789)
 - REMIT Regulation (EU) No 1227/2011, as amended by Regulation (EU) 2024/1106
 - EC Implementing Regulation (EU) 2026/256, repealing Regulation (EU) No 1348/2014
 - EC Delegated Regulation (EU) 2026/255
- Regulation (EU) 2015/703
- Regulation (EU) 2017/459 (subject to ongoing revision and expected to be amended in 2026)
- Regulation (EU) 2017/460
- Regulation (EU) 2019/942, as amended by Regulation (EU) 2024/1106
- ▲ Monitor the ongoing revision processes of relevant EU legislation and the development of new delegated acts, including developments related to a planned Delegated Regulation on thresholds for inside information under Regulation (EU) No 1227/2011, and initiate the implementation of necessary changes to ensure alignment with evolving transparency requirements.
- ▲ Meet transparency requirements specified in relevant NCs and liaise with ENTSOG Members to identify synergies in fulfilling these obligations.



Picture courtesy of Gas Connect Austria

3.6.2 KEY ACTIVITIES AND DELIVERABLES

In line with the published AWP 2026, ENTSOG continues its efforts to update and improve the ENTSOG TP for the benefit of all users and stakeholders. The TP provides technical and commercial data on the TSOs' transmission-relevant points, displayed via an interactive map, charts, tables, downloadable formats, and through Application Programming Interfaces (APIs). Selected information is also accessible via Really Simple Syndication (RSS) web-feeds. All data is provided by the TSOs and made available free of charge.

ENTSOG works closely with gas TSOs to ensure the application of relevant regulatory provisions, including the transparency requirements in the NCs and GLs, and the REMIT Regulation.

The following is a list of key activities and deliverables for 2027:

- ▲ Continue working with gas TSOs and supporting their fulfilment of the updated publication requirements in Directive (EU) 2024/1788 and Regulation (EU) 2024/1789.
- ▲ Continuously enhance the user experience of the TP, based on stakeholder input gathered from public surveys, the Functionality process, satisfaction surveys, and the TP "Submit a question" form.
- ▲ Organise a workshop to receive feedback from stakeholders following developments in regulations related to transparency.
- ▲ Evaluate communication tools used to engage TP users, including newsletters, surveys, and announcements on the Platform.
- ▲ Support gas TSOs in maintaining a high level

of data completeness and consistency of data publications, in line with legal obligations.

- ▲ As Registered Reporting Mechanism, continue providing aggregated fundamental data to ACER's ARIS, as required under Art. 12(1) of EC Implementing Regulation (EU) 2026/256.
- ▲ Follow up on reporting and data collection processes for TSOs and ENTSOG under REMIT obligations including developments related to the application of the recast REMIT Implementing Regulation (EU) 2026/256 and EC Delegated Regulation (EU) 2026/255.
- ▲ Support the TSOs in preparation for the re-authorisation process as Registered Reporting Mechanisms (RRMs), including facilitating communication and coordination within the TSOs and with ACER, where appropriate, in view of the authorisation process starting on 29 October 2027 and the application period for already registered RRM until 29 April 2028. ENTSOG will undertake preparatory work in relation to its re-authorisation as an RRM and an IIP (Inside Information Platform).
- ▲ Maintain, in cooperation with gas TSOs, close working relations with ACER and support bilateral efforts to enhance the application of REMIT. This includes participation in ACER public consultations, surveys, and stakeholder user groups such as the REMIT Expert Group, the RRM User Group, the IIP User Group, the AEMP Group, and dedicated roundtable meetings and joint webinars and workshops on REMIT reporting and inside information disclosure.

3.6.3 SUPPORTING ACTIVITIES

ENTSOG will facilitate required data collection processes when required by legislation, such as providing information for ACER's Congestion Monitoring Report, among others. The Transparency team will support TSOs from the Energy Community Contracting Parties with their ENTSOG TP transparency publications and actively participate in ACER's REMIT stakeholder groups, such as RRM User Group, AEMP Group, and roundtable meetings on REMIT reporting and inside information disclosure, engaging with these groups and contributing input, as well as through bilateral discussions on the processes and practices relevant for REMIT Regulation implementation and its further developments.

In addition, ENTSOG will continue cooperating with external stakeholders on REMIT-related activities to allow for alignment and coordination, including contributions to consultations on ACER REMIT documentation.

ENTSOG will maintain an ongoing dialogue with Members to provide support for ad hoc data requests related to ACER's monitoring activities or ENTSOG's research studies. Furthermore, ENTSOG will support on projects related to the usage of information provided by the TSOs in ENTSOG's Professional Data Warehouse (PDWS) including the ReCo System for Gas. Furthermore, ENTSOG is available to consult ENNOH on transparency activities, as requested.

3.6.4 PROGRAMME OF ACTIVITIES

The following table shows the expected timeline and key activities on Transparency Guidelines related issues:

Transparency Requirements and REMIT	2027											
	J	F	M	A	M	J	J	A	S	O	N	D
Continuous platform improvements.												
Activities on application of the transparency requirements in EU legislation												
Functionality Process for Transparency Guidelines												
Facilitate required data collection processes												
Support the TSOs from Energy Community CPs and ENNOH on REMIT and transparency topics												
Cooperate with ACER's REMIT Department on relevant REMIT-related activities												
Support to TSOs on data completeness												
Follow-up on REMIT requirements and the implementation of provisions under revised REMIT Regulation, including those from its forthcoming Implementing and Delegated Regulations												
Stakeholder satisfaction survey												
Public workshop on Transparency												

Activity periods
 Key deliverables available to external stakeholders
 Undetermined workload

3.7 FUNCTIONALITY PROCESS

Until November 2025, ENTSOG and ACER monitored and maintained the Gas NCs Functionality Platform. This interactive platform provided solutions to issues raised through the jointly managed ACER and ENTSOG Functionality (FUNC) Process. As no new issues had been raised in recent years, and none were under review or in development, the interactive platform was discontinued on 14 November 2025.

The ACER-ENTSOG FUNC process nevertheless remains operational, with stakeholders being able to submit new issues via the dedicated email address (support@gasnfunc.eu). All previous submitted cases and related documentation are available on ACER's website².

ACER and ENTSOG operate the FUNC Process to allow stakeholders to raise and discuss implementation and operational NCs and GLs issues. This provides an opportunity to be involved in developing solutions, which, at the end of the process, will aim at commonly recommended non-binding guidance.

3.8 SUPPORTING ACTIVITIES

3.8.1 STAKEHOLDER ENGAGEMENT ON NETWORK CODES

In the past years, ENTSOG has participated in the NC Implementation and Monitoring Group (NC IMG), a forum for high-level strategic coordination, with the EC, ACER, and ENTSO-E. This group oversaw the implementation and implementation monitoring of electricity NCs and gas NCs in the EU.

Going forward, ENTSOG aims to continue transparent dialogue and effective information exchange between the EC, ACER and ENTSO-E as well as ENNOH on the integration of the European electricity, gas and hydrogen markets and the important topics related to relevant legislative files. This dialogue will help to reinforce the participation of the renewable energy market and drive the investments necessary to provide security of supply.

3.8.2 DE-RISKING OF HYDROGEN INFRASTRUCTURE

Following the publication of the joint ENTSOG – ENNOH report on De-Risking Options for EU Hydrogen Infrastructure³ in 2026 and its presentation at the Energy Regulatory Forum in Copenhagen in 2026, ENTSOG will cooperate with the EC, ACER

and ENNOH and relevant stakeholders on potential next steps where needed – as mentioned in the 2026 Copenhagen Energy Infrastructure Forum Conclusions.⁴

2 <https://www.acer.europa.eu/gas/network-codes/functionality-platform>

3 https://www.entsog.eu/sites/default/files/2026-05/WEB_ENTSOG_ENNHO_report_de-risking_260427.pdf

4 <https://webgate.ec.europa.eu/circabc-ewpp/d/d/workspace/SpacesStore/ba3609d3-f9c4-4e75-9643-24048501a52e/download>



3.9 FUTURE NETWORK CODE DEVELOPMENT AND MARKET ANALYSIS

With Directive (EU) 2024/1788 and Regulation (EU) 2024/1789, ENTSOG will be tasked with the possible development of new NCs or amendments of existing NCs relevant for gas TSOs. These tasks cover items listed in Art. 71 of Regulation (EU) 2024/1789. The following activities are subject to decision and timelines defined by the EC:

- ▲ A Tariff NC amendment or a new NC related to natural gas transmission tariffs discounts and other provisions stemming from the 2024 Hydrogen and Decarbonised Gas Market Package. Following wording in Art. 71(2) (d), a hypothetical amendment or new NC might include topics such as those from Art. 17 (*tariffs for access to networks*) and Art. 18 (*tariff discounts for renewable gas and low-carbon gas*) of Regulation (EU) 2024/1789, and those from Art. 78(7) (*Duties and powers of the regulatory authority*) of Directive (EU) 2024/1788.
- ▲ Depending on the result of the ACER Public Consultation to assess the need to revise the INT NC, possibly participate in any formal regulatory amendment process for the potential future revision of the INT NC.
- ▲ A NC on rules for determining the value of transferred assets and the dedicated charge (to be developed jointly by ENTSOG and ENNOH).
- ▲ Participation in any formal regulatory amendment process for the potential future revision of the INT NC.

Furthermore, there may be possible ENTSOG involvement in EU discussions on market-related topics such as the application of NCs at points with third countries and possible temporary exemptions; provisions and derogations on tariff discounts for renewable and low-carbon gases; and any subsequent impact on Inter-TSO Compensation mechanisms.

ENTSOG will support the EC and ACER in developing and implementing the tasks and deliverables mentioned above. As some tasks are dependent on the European priority list, a detailed and updated programme of activities and timelines will follow in later editions of ENTSOG's AWP.



4 SCENARIOS AND INFRASTRUCTURE

The deliverables and activities outlined in this section reflect ENTSOG's obligations under Regulation (EU) 2024/1789 (Hydrogen and Decarbonised Gas Market Package), (EU) 2017/1938 (Security of Supply), (EU) 2022/869 (TEN-E) and EU 2015/703 (Interoperability & Data Exchange NC) and relate to scenario development, investment and infrastructure assessment for the EU energy system. One of ENTSOG's main deliverables are short and medium to long-term assessments such as the Union-wide TYNDP. Another example are ENTSOG's maps, that show commitment to transparency and to providing stakeholders with easily accessible information.

All these deliverables aim at developing a vision of the integrated European energy market, and in particular its infrastructure component. This is of special importance to achieve the European energy and climate targets, as well as to respect commitments to the EU Green Deal and the Paris Agreement.

The TYNDP Scenarios are jointly developed by ENTSOG and ENTSO-E, together with ENNOH, following the ACER framework guidelines, and in close collaboration with the Stakeholder Reference Group (SRG), aiming at an extensive engagement and cooperation with external stakeholders. This process is the entry point to the establishment of the TYNDP for natural gas and hydrogen. Next, the TYNDP methodological documents are developed, to set the framework and define clear guidelines for the TYNDP deliverables. It is envisaged that in 2027 the SRG will play a pivotal role in the TYNDP 2028 Scenario process, specifically in input into the development of methodologies.

The TYNDP 2026 comprises of the hydrogen Infrastructure Gaps Identification (IGI) report and Project-Specific Cost Benefit Analysis (PS-CBA) assessments that will feed into the EC's and Regional Groups' selection process of Projects of Common Interest (PCI) and Projects of Mutual Interest (PMI) of the hydrogen category. The TYNDP 2026 further contains a broader system assessment of the natural gas and the hydrogen system, including a Supply Adequacy Outlook and a Biomethane Progress Report, as required by Regulation (EU) 2024/1789.

In addition, as part of TYNDP 2026, ENTSOG will produce a dedicated report with infrastructure analysis, to complement the IGI and System assessments. The overall TYNDP and associated processes take a total of four years and are repeated every second year.

Following the finalisation of TYNDP 2026 deliverables, ENTSOG will commence the TYNDP 2028 process. Starting from Q2 2027, ENTSOG will collect from promoters the necessary data with regards to natural gas infrastructure and biomethane developments.

During 2026, ENTSOG started collaborating with ENNOH on TYNDP 2026 activities related to hydrogen. As required by Regulation (EU) 2024/1789, ENTSOG will transfer all information, data and analyses for the hydrogen component of the TYNDP, to ensure that, from 1 January 2027. If required and subject to agreement between the two organisations, ENTSOG may perform hydrogen-related TYNDP 2028 activities also in 2027, until ENNOH takes over the respective tasks completely.

During the first half of 2027, ENTSOG shall finalise remaining system-wide analyses and perform hydrogen and electrolyser project Cost Benefit Analysis (CBA)⁵. Subsequently, during Q3, ENTSOG will make adaptations for any formal feedback received from ACER and the EC to TYNDP 2026 materials. Subsequently, ENTSOG will submit the final TYNDP package to ACER for its Opinion, in line with Art. 27 of Reg. (EU) 2024/1789.

5 According to the [CBA methodology](#) approved by the EC in 2025, complemented by the specific guidelines (Annex D1 Implementation Guidelines) for PS-CBA of the TYNDP 2026 cycle that are part of the TYNDP methodological documents.

4.1 OBJECTIVES

- ▲ To assess the contribution of infrastructure solutions under different scenarios to the European Energy Policy, in particular sustainability, security of supply, competition and market integration, as well as to assess the European supply adequacy outlook through modelling of the integrated network and development of supply and demand scenarios.
- ▲ To support the investment process starting from gap identifications through to establishment of the respective infrastructure solutions.
- ▲ To support the Regional Groups, established by the EC, in the PCI and PMI selection process by providing the technical background and methodologies related to the cost-benefit analysis of projects.
- ▲ To provide support to institutions and stakeholders, by answering questions regarding natural gas and hydrogen infrastructure planning and operation, in context of EU policies.
- ▲ To develop ENTSOG's skills, methodologies and tools to meet the above objectives.
- ▲ To provide support to ENNOH in the hydrogen-related aspects of these processes, where needed.

4.2 KEY DELIVERABLES AND ACTIVITIES

- ▲ Publish the TYNDP 2028 draft Scenarios report.
- ▲ Publish the final TYNDP 2026 documents package.
- ▲ Support the System Capacity Map 2027 publication (jointly with GIE).
- ▲ Adapt ENTSO-E's and ENTSOG's consistent and ILM for future TYNDPs.
- ▲ Publish the Project-Specific CBA of PCI/PMI candidates for hydrogen infrastructure categories together with the TYNDP 2026.
- ▲ Perform the project data collection for the TYNDP 2028 for natural gas.
- ▲ Prepare and adapt the ENTSOG project portal to collect the necessary information to develop the TYNDP 2028 for natural gas.
- ▲ Publish documents related to the TYNDP 2028 project data collection (guidance documents such as GPI, submission handbook for promoters).

4.2.1 SCENARIOS FOR TYNDP 2028

The development of the TYNDP 2028 Scenarios will continue in 2027. The planning and co-ordinating of this cycle commences in 2026. Based on previous cycles, it is envisaged that in Q1 2027, data collections will be finalised. This includes validation and quality checks. All methodologies and assumptions will be approved and then these will be consulted in early Q2.

Modelling activities will also commence in Q2. In Q3, the results will be finalised, and report writing will commence.

Once the report is finalised it will be issued to ACER and the EC for opinion. Following this, ACER is expected to provide its feedback within a three-month period. Thereafter, the EC approval process is initiated. This is estimated to be an additional three months. The Scenario package is expected to be delivered in December 2027. When compared to previous cycles, it is expected that work on this deliverable will continue into 2028.

4.2.2 TYNDP 2026

With the entry into force of Regulation (EU) 2024/1789, TYNDP 2026 was the third and final joint hydrogen and natural gas TYNDP, covering the 2026–2050 time horizon. As for TYNDP 2024, it is composed of a dedicated assessment for hydrogen infrastructure gaps, complemented by a system-level adequacy assessment for natural gas and hydrogen. These assessments are performed using an integrated, cross-sectoral modelling set-up. TYNDP 2026 will serve as input to the third PCI/PMI selection process under the revised TEN-E Regulation.

Work for TYNDP 2026 commenced in 2025, with the project data collection. The infrastructure analysis and system-level assessments are conducted during 2026.

Project Fiches, the result of Project-specific Cost-Benefit Analyses (PS-CBA) for hydrogen PCI/PMI candidates, are planned to be published during spring 2026. In parallel, and if required, ENTSOG will adapt its IGI report with consideration of the opinions received from ACER, Member States, and the EC on the draft version. The draft TYNDP 2026 will be submitted to ACER for its opinion during Q3 2027. After receiving ACER's opinion, ENTSOG will prepare and publish the final TYNDP 2026.

In addition, in 2027, ENTSOG will continue to study the implementation of an expansion optimisation in the context of the IGI and TYNDP 2026, as recommended by ACER opinion 05-2025⁶.

4.2.3 HYDROGEN PROJECT ASSESSMENT FOR TYNDP 2026

During Q1 2027, ENTSOG will undertake PS-CBA for hydrogen projects that intend to become PCI or PMI, as confirmed during the TYNDP 2026 project collection. The PS-CBA of hydrogen PCI or PMI candidates follows the methodology described in Annex D1 of the TYNDP 2026. At the EC's request, ENTSOG will subsequently perform PS-CBA for electrolyser units seeking PCI/PMI status.

ENTSOG will continue to support the EC in the PCI/PMI selection process under the revised TEN-E Regulation. In practice, this will continue to be undertaken through an informal working group – the Cooperation Platform – composed of the EC, ACER, ENNOH and ENTSOG, and through Regional Groups meetings.

4.2.4 ENTSO-E/ENTSOG CONSISTENT AND INTERLINKED MODEL

As required by Regulation 2022/869, ENTSO-E and ENTSOG jointly delivered the ILM report to the EC and ACER on 31 October 2025. ENTSOG and ENTSO-E continue to work on the interlinked model, expanding the co-operation to include ENNOH.

The key projects to be explored in this voluntary cooperation will focus on:

- ▲ A joint Electricity-Hydrogen “System Needs Assessment” based on investment modelling. The project will take an expansion modelling approach compared to the current static infrastructure level approach.

- ▲ Integration of methane in the current ILM. In this model, methane will be modelled directly, with interlinkages to the hydrogen and electricity system. The current ILM only considers methane as a global fuel with a single price. Although this project is on the roadmap for the Interlinked Model Task Force (ILM TF) and the WG Scenario Building (WGSB) innovation roadmap, the model will initially be built internally within ENTSOG, with the knowledge being brought to the ILM TF and WGSB in future. Further details on this work are outlined in the Research and Development section of this report.

6 [ACER Opinion 05-2025 on ENTSOG's draft Hydrogen Infrastructure Gaps Identification report](#)

4.2.5 MAPS 2027

Since its creation, ENTSOG has developed and published a series of infrastructure maps related to the European gas network. These maps are produced on a voluntary basis but have been widely recognised and appreciated by institutions, industry stakeholders, and policymakers as valuable tools for gaining a comprehensive overview of the gas infrastructure across Europe.

One of the key publications is the System Capacity Map, which ENTSOG publishes annually jointly with GIE. This map provides a clear visualisation of

supply and demand trends across the European gas network, along with the most recent capacity data. In addition to the annual System Capacity Map, ENTSOG has been publishing the TYNDP Map on a biannual basis since 2018. This map consolidates all projects included in the TYNDP, offering an overview of planned infrastructure developments, investments, and future capacity enhancements.

In 2027, ENTSOG will publish an updated System Capacity Map in collaboration with GIE, reflecting the latest data and developments.

4.3 SUPPORTING ACTIVITIES

4.3.1 SUPPORT TO REGIONAL GROUPS ON THE PCI/PMI SELECTION PROCESS

To the extent envisioned by the EC, ENTSOG will take part to the Cooperation Platform between the EC, ACER and ENTSOG, and will participate in and support the work of the Regional Groups lead by the EC for the purpose of the selection of PCIs and PMIs.

In 2027, ENTSOG will support promoters of projects applying for the PCI or PMI status, as for the pre-

vious PCI/PMI selection processes, including by conducting PS-CBA, in line with the methodology (Annex D1) of the TYNDP 2026. The publication of PS-CBA results, expected at the end of Q1 2027, will provide a transparent tool to all concerned stakeholders taking part in the PCI/PMI selection process. ENTSOG will publish the assessment results as part of the TYNDP 2026 publication.

4.3.2 SUPPORT MEMBER STATES IN DECISIONS CONCERNING THE CESSATION OF OPERATIONS AT UNDERGROUND NATURAL GAS STORAGE FACILITIES

As required by Art. 15(11) of Regulation (EU) 2024/1789, ENTSOG will support Member States, in cooperation with TSOs, by developing opinions to assess if the cessation of operations at underground

natural gas storage facilities could adversely affect the security of natural gas supply at EU level, based on an analyses of the natural gas infrastructure assessment from a security of supply perspective.

4.4 PROGRAMME OF ACTIVITIES

The following table shows the expected timeline and key activities on Scenarios and Infrastructure related issues:

Scenarios and Infrastructure	2027											
	J	F	M	A	M	J	J	A	S	O	N	D
Adaptation of Interlinked Model												
Maps												
Support Activities												
TYNDP 2026												
Draft Scenarios development*												
Final Scenario Report												
Adaptations to modeling tools												
Draft System Assessment												
Project-specific Cost-Benefit Analysis (PS-CBA)												
Final TYNDP 2026 publication												
TYNDP 2028												
Draft Scenario development and publication												
Guidelines for Project Inclusion – natural gas												
Project data collection preparation activities – natural gas												
Project data collection – natural gas												
Guidance documents (Annex D)												
Natural Gas System Assessment												
Supporting activities ENNOH – hydrogen TYNDP												

■ Activity periods

■ Key deliverables available to external stakeholders

■ Undetermined workload

* Publication of final documents is planned after maximum 6 months for regulatory opinion by ACER & Member States & opinion/ approval by EC, in line with provisions of the TEN-E regulation. A period of a few weeks is added for final amendments, according to the indications received.



5 SECURITY OF SUPPLY

The impact of the Russian invasion of Ukraine, as well as the situation in the Middle East and Strait of Hormuz energy crisis have shown the impact of geopolitical events and longer lasting and/or sudden supply disruptions and the increased risks created.

To ensure infrastructure adequacy, ENTSOG will continue to contribute to supporting the adoption of new legislative frameworks for security of gas supply. Under the current Security of Supply Regulation⁷ ENTSOG will continue to take part in the works of the GCG and ensure functionality of the ReCo System for Gas.

Unstable geopolitical situations, reported attacks on energy assets as well the rising number of sabotage incidents, hybrid attacks, and cyber threats, highlight the growing vulnerability of critical energy infrastructure. These evolving risks underline the importance of strengthening the protection and resilience of energy infrastructure as a key element of security of gas supply and preparedness planning.

On that basis, ENTSOG has joined the GIE Physical Security Working Group to engage with other system operators on key security topics, including intelligence-sharing practices, evolving threat landscapes, and the implementation of relevant EU legislation.

Within the GCG crisis management formation, ENTSOG facilitates the exchange with all relevant stakeholders on any information relevant to the security of gas supply at national, regional, and EU level.

With a growing hydrogen market and the need to facilitate transmission of these molecules with gas infrastructure, ENTSOG will continue to evaluate how security of supply risks can also be addressed on the basis of the further development of such infrastructure.

5.1 OBJECTIVES

- ▲ Facilitate regional cooperation for security of supply (SoS) and operational issues.
- ▲ Facilitate the functioning of the ReCo System for Gas as CNOT for emergency conditions and maintain the incidents classification scale, as required by Regulation (EU) 2024/1789. ReCo Team Europe, the operational group of gas TSOs established under the ReCo System for Gas, remains available 24/7 to support coordination, as needed, to help address, with other stakeholders, security of supply challenges in Europe. The group also meets regularly to exchange information and discuss relevant issues.
- ▲ Support the GCG and relevant stakeholders in the implementation of the security of supply measures and the assessment of European security of supply.
- ▲ Provide support to institutions and stakeholders in the provision of gas demand and Supply Outlooks, reviews, and monitoring activities.

⁷ [Regulation – 2017/1938 – EN – EUR-Lex](#)

5.2 KEY DELIVERABLES AND ACTIVITIES

- ▲ Summer Supply Outlook 2027 with Winter 2027/28 Overview.
- ▲ Summer Supply Review 2026.
- ▲ Winter Supply Outlook 2027/28 with Summer 2028 Overview.
- ▲ Winter Supply Review 2026/27.
- ▲ Maintain and improve the existing Outlook and Review Visualisation dashboard.
- ▲ Support functioning of the ReCo System for Gas.
- ▲ Support to the Gas Coordination Group.
- ▲ Support the EC in with security of supply assessments.
- ▲ Support the EC, GCG, and Member States in any revision of the Security of Supply Regulation within the EU energy security framework, and other related legislation.
- ▲ Cooperate with non-EU TSOs and coordination of security of supply activities.
- ▲ Undertake communication and tabletop exercises for better risk preparedness.
- ▲ Develop and adopt updates to the existing ReCo System for Gas and Incidents classification scale.
- ▲ Maintain and improve existing tools for gas flow patterns monitoring.
- ▲ Monitor gas supply patterns, cross-border flows, gas market functioning and gas consumption in EU Member States, identify potential risks to security of supply, and ensure regular coordination and information exchange with TSOs and the EC.
- ▲ Monitor the filling of the European gas storage facilities according to EU targets.
- ▲ Assist with the process of TSOs maintenance plans coordination and potential impact on gas flow patterns.
- ▲ If requested, assist relevant stakeholders and TSOs in assessing risks, analysing vulnerabilities, and implementing measures to protect and strengthen the resilience of physical infrastructure against man-made threats.

5.2.1 OUTLOOKS AND REVIEWS

In developing outlook reports, ENTSOG builds upon the experience and methodologies established since 2010, continuously refining its analysis based on stakeholder feedback and ACER opinions. Supply outlooks benefit from the latest advancements in IT/R&D activities, particularly in the fields of modelling, supply and demand analysis, and scenario planning.

These technological and analytical improvements enable ENTSOG to deliver more accurate and relevant assessments, enhancing the quality and usability of the reports.



5.2.1.1 Summer Supply Outlook 2027 with Winter 2027/28 Overview and Summer 2026 Review

ENTSOG plans to publish its Summer Supply Outlook 2027 in April 2027, which will include a Winter 2027/28 Overview to provide early insights to stakeholders at the beginning of the injection season. This proactive approach aims to support market participants and policymakers by offering a comprehensive assessment of supply and infrastructure readiness well in advance of the winter period.

In the Summer Supply Outlook 2027, ENTSOG will focus on evaluating the capacity and resilience of the European gas infrastructure to provide adequate flexibility. This includes assessing the ability of infrastructure to support storage injections and withdrawals, especially in the context of known geopolitical situations, which may impact supply security. It is important to note that the Summer Supply Outlooks are not intended as forecasts of market behaviour but rather as assessments of the infrastructure's ability to deliver services under various scenarios.

The analysis considers the latest trends in supply and demand, providing insights into system robustness and resilience. Since 2013, the EC and Member States, through the GCG, have the possibility to request ENTSOG to perform specific assessments tailored to situations or concerns. These targeted analyses support informed decision-making and policy development at the European level.

In addition to the Summer Supply Outlook 2027, ENTSOG will also voluntarily publish the Summer 2026 Review. This review will analyse the behaviour of the gas market during the summer of 2026, based on observed daily gas flows, price developments, and market dynamics. It will offer a valuable opportunity to investigate short-term demand and supply trends, including the behaviour of gas demand for power generation, storage utilisation, and the impact of any significant market events during this period. This analysis will also serve as an input to ENTSOG's ongoing R&D activities, supporting the continuous improvement of analytical approaches and modelling techniques for future deliverables.



5.2.1.2 Winter Supply Outlook 2027/28 with Summer 2028 Overview and Winter 2026/27 Review

ENTSOG plans to publish its Winter Supply Outlook 2027/28 in October 2027, including the Summer 2028 Overview to provide early insights to stakeholders at the beginning of the withdrawal season. This proactive approach aims to support market participants and policymakers by offering a comprehensive assessment of supply and infrastructure readiness well in advance of the winter period.

The Winter Supply Outlook will evaluate the potential evolution of gas storage inventories across different winter scenarios, providing insights into the capacity of European gas infrastructure to meet winter demand conditions. This assessment will consider various scenarios reflecting different demand levels, including peak conditions, supply disruptions, and storage refill strategies, offering stakeholders a comprehensive understanding of the system's capacity to maintain security of supply during the winter months. This is especially relevant in known geopolitical situations, which has may impact energy security and the need to consider supply diversification. It is important to note that the Winter Supply Outlooks are not intended as forecasts of market behaviour but rather as assessments of the infrastructure's ability to deliver services under various scenarios.

The analysis considers the latest trends in supply and demand, providing insights into system robustness and resilience. Since 2013, the EC and Member States, through the GCG, have the possibility to request ENTSOG to perform specific assessments tailored to particular situations or concerns. These targeted analyses support informed decision-making and policy development at the European level.

In addition to the Winter Supply Outlook 2027/28, ENTSOG will also voluntarily publish the Winter 2026/27 Review. This review will analyse the behaviour of the gas market during the winter of 2026/27, based on observed daily gas flows, price developments, and market dynamics. It will offer a valuable opportunity to investigate short-term demand and supply trends, including the behaviour of gas demand for power generation, storage utilisation, and the impact of any significant market events during this period. This analysis will also serve as an input to ENTSOG's ongoing R&D activities, supporting the continuous improvement of analytical approaches and modelling techniques for future deliverables.

5.2.2 REGIONAL COORDINATION (ReCo) SYSTEM FOR GAS

ENTSOG will ensure facilitation of the existing ReCo System for Gas as a CNOT for emergency conditions and maintain the incidents classification scale, and other supporting documentation for the ReCo Team Europe.

Given the uncertainties with changing geopolitical situations and its potential impact on gas flows in Europe, ENTSOG and the gas TSOs will continue their close cooperation and exchange of dispatching data. This also includes assessing the gas system's resilience and readiness to address potential supply disruptions. ENTSOG will continue to maintain, improve and publish dedicated dashboards with aggregated information and assessments about gas flows in the EU, flow patterns, storage filling level targets, market behaviour and security of supply updates with TSOs and relevant stakeholders such as the EC and ACER.

ENTSOG, in coordination with the ReCo Team Europe, will in 2027 continue to facilitate stronger cooperation in the energy sector in the case of sudden 'stress' events, in addition to normal conditions and planned events, in particular with electricity TSOs (via ENTSO-E), and other relevant associations.

ENTSOG will continue to assist the process of TSOs maintenance plans coordination. Additionally, TSOs will continue to closely cooperate in coordinating and planning the maintenance of networks to minimise any disruption of transmission services to network users and transmission system operators in general, and to ensure equal benefits with respect to security of supply, particularly in relation to transit.

In 2027, ENTSOG will continue to utilise and further improve its ReCo 2.0 platform providing visualisation of a relevant range of data on an EU level to monitor the security of gas supply and to support the TSOs' dispatching centres during normal and emergency conditions. Improved information for all TSOs will contribute to a more efficient and secure management of the gas transmission systems by allowing faster and more efficient preventive and remedial actions by TSOs to emergency situations.

5.3 SUPPORTING ACTIVITIES

5.3.1 SUPPORT TO GAS COORDINATION GROUP (GCG)

ENTSOG will continue to support the EC and the GCG in the implementation of security of supply and solidarity measures and address the tasks requested by the GCG. On request of the EC, security of supply updates, observations of existing situation with gas flows in Europe, identified risks and preventive measures and activities will be provided in GCG meetings. Through the GCG and when preparing supply outlooks reports, ENTSOG will continue to encourage Member States to provide feedback on particular cases of interest.

Furthermore, ENTSOG will support the TSOs and Member States in their risk assessments based on the results of the Union-wide simulation or other ENTSOG calculations or analysis.

The ENTSOG team will assist the TSOs and competent authorities in the establishment of the preventive action and emergency plans, and possible new documentation regarding potential threats to business continuity. If required, ENTSOG will support the TSOs and competent authorities to agree on the technical arrangements for the application of the solidarity principles and any relevant requirements that may arise from new EU energy security frameworks, including the revision of the Security of Supply Regulation. As has been undertaken to date, ENTSOG will continue to support the EC and the TSOs in conducting ad hoc analysis investigating the different geopolitical challenges in the context of the security of gas supply.

5.3.2 COOPERATION BETWEEN MEMBER STATES, ENERGY COMMUNITY AND THIRD COUNTRY TSOs

In 2027, ENTSOG will continue to support Energy Community Contracting Parties and third countries TSOs concerning security of supply. In particular, assistance will be provided to enhance technical cooperation with the third country TSOs supplying or transiting gas to the EU and, to exchange technical and operational information in case of unforeseen stress events.

ENTSOG will continue to organise meetings in the framework of the External Contact Platform (ECP) in cooperation with the Energy Community Secretariat. This platform was developed by ENTSOG and the Energy Community Secretariat, to strengthen ENTSOG's cooperation with non-EU gas transmission companies, including those from the Energy Community countries. In 2027, there will be continued support for the TSOs of Member States, Energy Community and third countries in the implementation of the EU Network Code rules by expanding regional cooperation, via workshops or meetings organised by ENTSOG.

If required, ENTSOG intends to organise a potential workshop involving EU TSOs and relevant adjacent non-EU TSOs (e. g., TSOs from North African countries, Turkey and parties acting as TSOs) supplying or transiting gas to EU, to discuss future steps for strengthening technical cooperation.

ENTSOG will also continue in 2027 to facilitate the meetings and the activities of the EU-UK Gas TSOs Task Force, which was created in 2021 as the interface between ENTSOG and the UK TSOs. This is upon the request of the EC and the UK Government in accordance with the Trade and Cooperation agreement concluded by the EU and the UK following the Brexit. The main goal of this Task Force is to ensure further cooperation between the EU and the UK TSOs.

5.4 PROGRAMME OF ACTIVITIES

The following table shows the expected timeline and key activities on Security of Supply related issues:

Security of Supply	2027											
	J	F	M	A	M	J	J	A	S	O	N	D
Summer Supply Outlook 2027 & Review												
Summer Supply Outlook 2027												
Summer Review 2026												
Winter Supply Outlook 2027/28 & Review												
Winter Supply Outlook 2027/28												
Winter Review 2026/27												
Support to GCG and EC												
Support to the EC and GCG concerning the relevant regulation, regional Emergency Plans, Preventive Action Plans, solidarity mechanisms, EU storage facilities filling targets, phase out the EU's imports of Russian gas												
Facilitation of ReCo System for Gas												
Review and update of the ReCo System for Gas												
Cooperation with ENTSO-E, ENNOH and other associations in Security of Supply (energy)												
Development of visualisation solutions and tools for exchange of operational data between TSOs (incl. ReCo 2.0)												

■ Activity periods ■ Key deliverables available to external stakeholders



Picture courtesy of TAP

6 ENERGY TRANSITION

At an EU-wide scale, there are a number of energy transition initiatives that will impact gas transmission infrastructure and influence the work of ENTSOG in 2027. The European Grids Package aims to modernise and streamline the EU's legal and planning framework for energy grids, with a focus on cross-border integration and efficient infrastructure use. The Package that was launched by the EC in December 2025 included a proposal to revise the TEN-E Regulation ((EU) 2022/869). The latter currently requires ENTSOG and ENTSO-E to jointly develop scenarios for the future European energy system in the context of their respective Ten-Year Network Development Plans (TYNDPs).

Joint scenarios are a key step towards an interlinked approach to energy system analysis and allow the ENTSOs to undertake infrastructure analysis from a common and consistent set of assumptions and data. This therefore puts gas and electricity TSOs in a unique position to provide quantitative European scenarios focused on the impact of the energy transition on the European electricity and gas infrastructure needs and challenges for the long-term horizons. ENTSOG will also assess the impact of the TEN-E Regulation revision on the options for clean molecules integration infrastructure (including biomethane).

With the EC proposal of the CO₂ Markets and Infrastructure regulatory package at the end of 2026, ENTSOG will assess the implications for cross-border CO₂ transport, infrastructure and storage. To date, CO₂ infrastructure projects have been developed in isolation. A harmonised EU-wide coordination and national planning framework can address fragmentation and regulatory challenges, particularly for cross-border initiatives. ENTSOG, as trusted technical adviser, is well placed to support coordination, leveraging its expertise and experience gained while developing natural gas infrastructure and market functioning. Furthermore, in 2027 ENTSOG will monitor any potential developments related to a possible revision of the CCS Directive (EC No. 2009/31) and of the London Protocol, which governs the transboundary export of CO₂ for offshore storage and currently impose constraints on such activities.

The Hydrogen and Decarbonised Gas Market Regulation (EU) 2024/1788 provides for new market rules applying to gas and hydrogen infrastructure, with the aim of ensuring non-discriminatory access to hydrogen infrastructure, similar to what already is in place for electricity and gas. The implementation of and Regulation (EU) 2024/1789 will continue into 2027, and includes shared activities for ENTSOG and ENNOH, especially regarding future grid planning. Directive (EU) 2024/1788 within this Package also impacts TSOs activities for the coming years.

Based on the above, ENTSOG's engagement in the energy transition related activities will focus on the following core topics:

- ▲ Decarbonised and affordable gas infrastructure, including the transport of renewable (e. g. biomethane) and low carbon gases, in some cases via repurposing existing assets;
- ▲ Energy system integration and cooperation with gas, hydrogen and electricity value chains;
- ▲ CO₂ transport, infrastructure and storage.

Decarbonisation of gas sector via integration of clean molecules (biomethane and hydrogen)

To facilitate appropriate network planning and ensure continued decarbonisation and security of supply, ENTSOG will be engaged in fulfilling the monitoring tasks (some of which are described in other sections of this AWP), such as:

- ▲ Publication of the third annual report on renewable and low-carbon gas injected in the natural gas network.
- ▲ Publication of the second bi-annual gas quality monitoring report and the second bi-annual report on sustainable biomethane in early 2027.
- ▲ Progress of certification and Guarantees of Origin work at the EU and at the national level, impacting gas quality developments, e. g., biomethane cross-border transport.
- ▲ Support work on biomethane deployment within the framework of EC's Biogas Tripartite Agreement.

Furthermore, ENTSOG will support the relevant cooperation with ENNOH, as provided for by Regulation (EU) 2024/1789.

ENTSOG will also facilitate cooperation on the network planning under the TYNDP 2028 cycle via scenario development with ENTSO-E and ENNOH. Also under this Regulation, ENTSOG will continue monitoring the progress on the production of sustainable biomethane, as part of TYNDP supply adequacy outlook.

Finally, for effective decarbonisation of gas grids, ENTSOG will continue engaging with relevant stakeholders from the hydrogen, electricity, and gas value chains. Engagement with storage and LNG system and ports operators, DSOs and hard-to-abate off-takers of hydrogen are of particular relevance.

Additionally, ENNOH and ENTSOG will continue structured exchange to explore further potential solutions to de-risking cross-border hydrogen infrastructure and towards a possible implementation roadmap to support the ramp-up of hydrogen networks. This work commenced in 2026 and will continue in 2027, as requested by participants at the 12th Energy Infrastructure Forum in Copenhagen.

Energy System Integration

Energy system integration accelerates decarbonisation, supports EU climate targets, and strengthens industrial competitiveness. Noting that the future energy grids system will become progressively more electrified, with increasing volumes of hydrogen transport, it is critical to also include consideration of the benefits of gas infrastructure to enable inclusion of clean molecules and ensure an affordable and resilient energy transition. Flexibility offered by molecules such as natural gas, and renewable and low-carbon gases such as hydrogen and biomethane, can help address intermittency of renewable energy supply and the challenge of quick and affordable decarbonisation on both the electrons and molecules side.

In that context, ENTSOG aims to develop a methodology to investigate adequacy between supply and demand of gas grid and the actual status of the energy transition, covering a time span of ten years, via a mid-term gas adequacy assessment.

The work already undertaken on this approach was supported by the participants of the 40th European Gas Regulatory Forum in Madrid in 2026.

As the share of renewable and low-carbon gases continues being transported increases, it is imperative to understand the consequently impact on security of natural gas supply. Furthermore, future repurposing of gas assets for hydrogen and its impact should be assessed in the context of maintaining infrastructure and supply standards. During the early stages of the hydrogen market development, especially for repurposing activities, security of supply activities for the gas and hydrogen sectors should remain fully coordinated to deliver a common, integrated planning approach. In 2027, ENTSOG will consider the impacts of the energy transition within a new Energy Security Framework and a possible revised Security of Supply Regulation.



CO₂ transport, infrastructure and storage

Coordinated planning, including building synergies across electricity, gas, hydrogen and CO₂ networks, enables cost savings, environmental benefits, and system efficiency. With the proposal by the EC of the CO₂ Markets and Infrastructure package at the end of 2026, ENTSOG will in 2027 assess the implications for cross-border CO₂ transport. Network operators for gas bring valuable experience in planning, stakeholder coordination, and technical evaluation, making them well-suited to manage future CO₂ networks.

The development of an EU-wide CO₂ market not only offers climate benefits but is a crucial technology for European industry, the preservation of its industrial base, and accelerating the EU's energy transition. Holistic planning across gas, electricity, hydrogen, heating and CO₂ networks enables cost-effective infrastructure development, supports repurposing of assets, anticipates electricity demand for capture/liquefaction, and aligns hydrogen production with CO₂ transport needs.

ENTSOG will continue to contribute to the relevant discussions on the future of gas grids in context of CO₂ transport systems. In 2027, ENTSOG will continue engaging with stakeholders on the implications of the CO₂ package, exchanging views on the proposed framework, and aims to offer input as technical experts to support the deployment of CO₂ transport solutions.

ENTSOG will participate to the EC's ICM Forum 2027, as requested. Members' expertise and experience on technical aspects of CO₂ handling in gaseous and liquid form has provided benefit for knowledge to develop the standardisation workstreams at both EU and national levels. ENTSOG will also continue its CO₂ project progress monitoring initiative to ensure a streamlined information flow and information exchange forum for TSO Members.

6.1 OBJECTIVES

- ▲ Communicate ENTSOG activities for the implementation of Regulation (EU) 2024/1789, coordinate ENTSOG actions and communication related to task implementation.
- ▲ Ensure timely information flow for ENTSOG's activities related to the security of supply for gases under the gas grids repurposing phase.
- ▲ Propose practical solutions for implementation of integrated planning for gas, hydrogen, and electricity, security of supply and market development via the Madrid, Copenhagen, Rotterdam, and Florence fora and through other communication channels.
- ▲ Assess the implications of the CO₂ Markets and Infrastructure regulatory package and facilitate discussions with members and stakeholders on this topic.
- ▲ Coordinate and exchange with stakeholders along the whole value chain on best practices related to the transitioning of gas grids (via the ENTSOG Advisory Panel for Future Gas Grids).
- ▲ Monitor key energy/climate policy and regulatory developments put forward by EU institutions.
- ▲ Communicate ENTSOG's positions regarding EU legislative and policy proposals impacting the gas sector and the overall energy system.
- ▲ Engage in dialogue with EC, ACER, industry associations, energy sector associations and other key EU stakeholders.
- ▲ Develop communications to assist stakeholders understand how gas grids can contribute to decarbonisation and energy transition in different sectors of the EU economy.
- ▲ Showcasing TSO projects that facilitate decarbonisation and the energy transition, for example via the ENTSOG Talks podcast series and the ENTSOG Annual Conference.

6.2 KEY ACTIVITIES AND DELIVERABLES

- ▲ Preparation of the materials to allow a common understanding of the EU regulatory framework among the TSOs, for example: the Hydrogen and Decarbonised Gas Market Package, the TEN-E Regulation and impact on clean molecule integration infrastructure and infrastructure planning, the CO₂ Transportation Infrastructure and Markets regulatory package, the Energy Security Framework, among others.
- ▲ High-level position papers and proposals for regulatory developments, based on the steer and priorities identified by the ENTSOG Board, on topics such as biomethane, CO₂ transport, integration of gas and hydrogen planning, impact of clean molecules on security of energy supply, and energy transition market developments.
- ▲ Proposals for external and internal communication on ENTSOG's positions, monitoring works and progress reports: ENTSOG responses to relevant public consultations and stakeholders' engagement processes.
- ▲ ENTSOG inputs and positions for relevant sectoral fora (European Gas Regulatory Forum in Madrid; Energy Infrastructure Forum in Copenhagen; Hydrogen Regulatory Forum in Rotterdam; European Electricity Regulatory Forum in Florence; Industrial Carbon Management Forum), as well as any other relevant reports and studies concerning topics on market design, grid planning and grid operations that result in decarbonisation.
- ▲ Continued engagement with academic institutions such as Florence School of Regulation, Copenhagen School of Infrastructure and the New Energy Business School to discuss goals and governance of energy climate policy. Topics may include de-risking for hydrogen projects, assessing trends on the energy transition, as well of promotion of functioning of the gas NCs, for example.
- ▲ Stakeholders' engagement on energy transition and decarbonisation topics, including through the Advisory Panel for Future Gas Grids.
- ▲ Participation in the activities of the Prime Movers on Guarantees of Origin and Certification and of the Prime Movers on Gas Quality.

6.3 REPORT ON ANNUAL RENEWABLE AND LOW-CARBON GAS INJECTIONS INTO GAS NETWORKS

Gas Regulation 2024/1789 mandates ENTSG to publish a yearly overview on injections of renewable and low-carbon gases into the natural gas network.⁸

After collecting and analysing TSO delivered data on injections of renewable and low-carbon gases (biomethane and hydrogen) into natural gas grids (both TSO and DSO), ENTSG will publish the third edition of this report in 2027.

6.4 PROGRAMME OF ACTIVITIES

The following table shows the expected timeline and key activities:

Activities	2027											
	J	F	M	A	M	J	J	A	S	O	N	D
Preparation of the materials to allow a common understanding of the EU regulatory framework among the TSOs												
High-level position papers and proposals												
Proposals for external and internal communication												
Inputs and positions for relevant sectoral fora and deliver outputs required by fora												
Engagement with academic institutions such as Florence School of Regulation, Copenhagen School of Infrastructure and the New Energy Business School												
Stakeholder engagement on key Energy Transition topics via the Advisory Panel for Future Gas Grids												
Participation in the Prime Movers' activities												
Report on annual renewable and low-carbon gas injections into gas networks												

Activity periods

Key deliverables available to external stakeholders

8 Art. 26 (3i), Regulation 2024/1789: "The ENTSG for Gas shall adopt: ... (i) an annual report including the quantity of renewable gas and low-carbon gas injected into the natural gas network".



7 RESEARCH AND DEVELOPMENT

7.1 OBJECTIVES

Regulation (EU) 2024/1789 requires that the ENTSG AWP includes a list and description of its research and development activities. ENTSG is committed to working towards and promotion of its Members' activities innovation, improvement of processes and strives to meet challenges on an ongoing basis.

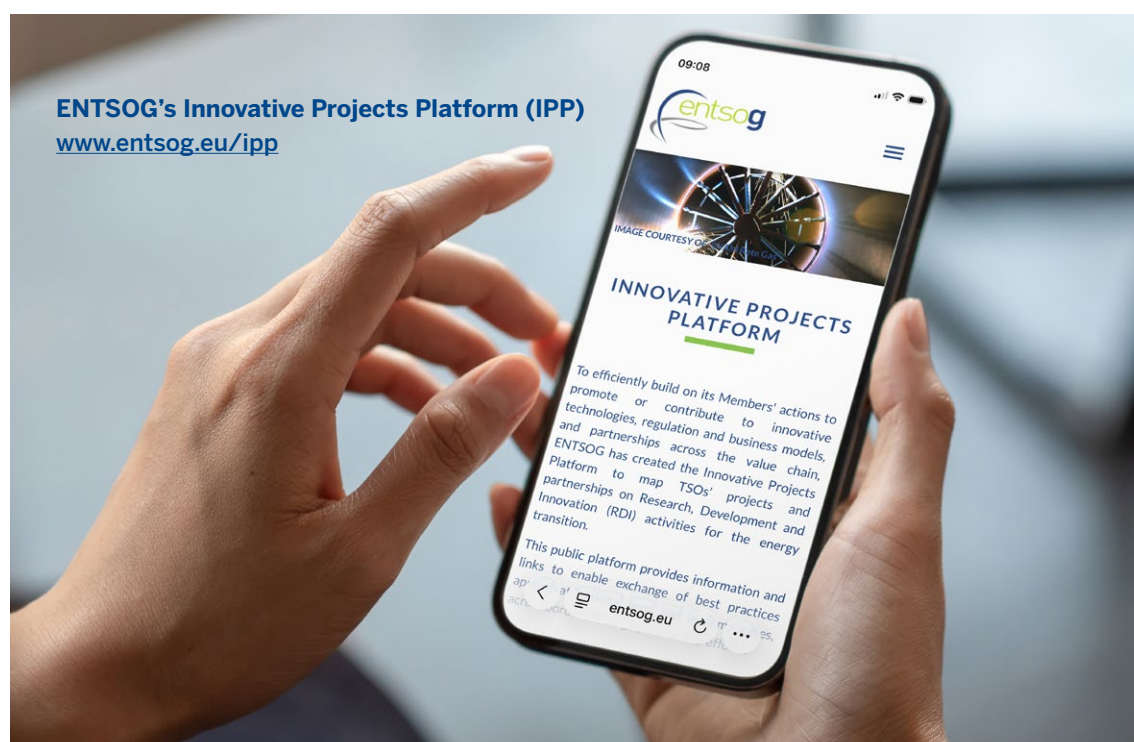
This is evidenced in this section, in which the tools, methodologies, stakeholder engagement processes and IT solutions are outlined to address potential difficulties and to improve our way of working.

7.2 KEY DELIVERABLES AND ACTIVITIES

7.2.1 CO₂ PROJECT PROGRESS MONITORING

In 2027, ENTSG will continue to actively monitor developments related to CO₂ transport, infrastructure and storage across the value chain and engage with its Members and external stakeholders on these developments. The CO₂ progress project monitoring activity aims to streamline the flow of information sharing and assist any interested parties in the tracking of updates related to any upcoming regulation for CO₂ transport infrastructure.

It also relates to repurposing of gas grids for a CO₂ transportation system, ENTSG's ongoing dialogues between stakeholders, and relevant projects and technical progress across EU Member States, further assisting in the coordination of knowledge sharing and best practices. It is intended that these projects would then be showcased on ENTSG's Innovative Projects Platform (IPP), on the ENTSG website.



7.2.2 “THREE CARRIERS MODEL” AND “INTERLINKED MODEL”

In 2027, ENTSG will continue advancing its modelling framework, building on the TYNDP 2024 and 2026 scenario development process and the outcomes of the ILM Report. This effort will focus on developing a model that provides a complete system overview by incorporating natural gas, electricity, and hydrogen synergies, while expanding the framework's scope through integration of the methane system, including methanation processes, to support a more comprehensive whole-system perspective.

ENTSG's Three Carriers Model (TCM), developed within the PLEXOS tool, will complement the Dual Hydrogen Electricity Model (DHEM) and the Dual Gas Model (DGM), contributing to the joint modelling of natural gas and electricity systems. It will support the study on cross-sector system needs assessment, aimed at identifying opportunities and challenges related to deeper sector integration.

This work will contribute to the progressive development of a more integrated, transparent, and robust cross-sector modelling framework for future TYNDP cycles and mid-term analyses.

The ILM will continue as an innovation project, in this context, ENTSG, ENTSO-E and ENNOH will keep working together to design the modelling architectures used to model cross-carrier interactions across electricity, hydrogen, and methane. The focus will be on developing a joint System Needs Assessment (power/hydrogen) and integrating methane into the models.

There is a clear link between the TCM and the ILM, as TYNDP deliverables will build on insights gained during the development of the TCM model.

7.2.3 HYDROGEN AND GAS QUALITY ASSESSMENT, INCLUDING SMART GRID SOLUTIONS

ENTSG will continue its activities in analysing the feasibility of the integration of renewable and low-carbon gases into the gas grid and pipelines repurposed to transport hydrogen and CO₂. Furthermore, this analysis will support the cost-effective integration of renewable and low carbon gases such as synthetic methane, biomethane, and hydrogen in the network in accordance with consumers' needs and gas quality requirements. ENTSG is committed to further work in analysing the possibilities of deploying smart grid solutions and digital tools for gas quality and hydrogen handling. This could include digital systems for online gas quality tracking and forecasting, sensor technologies for interactive and intelligent metering, among others.

For repurposing pipelines for hydrogen use, ENTSG is involved in the PilgrHYm project, a pre-normative research project which has received

co-funding from the EC and the Clean Hydrogen Partnership. The project brings together more than twenty stakeholders from the gas value chain and aims to develop protocols and guidelines for repurposing existing gas pipelines for hydrogen use. ENTSG is member of the Advisory Board of the PilgrHYm project and will contribute by providing the information necessary to the project and monitoring its advancement.

As part of EU Regulation 2024/1789, ENTSG will continue working closely with its members and stakeholders in assessing the potential achievable hydrogen purity levels for repurposed gas grids, the potential implementation of hydrogen blends and a minimum acceptable oxygen level at IPs for the unhindered cross-border flow of biomethane, and the Wobbe Index classification system for exit points.

7.2.4 MID-TERM ANALYSIS FRAMEWORK

The EU Gas Regulatory (Madrid) Forum in 2026 recognised the importance of providing market participants sufficient legal certainty, as well as coherent, pragmatic and flexible implementation of European legislation. It welcomed ENTSG's presentation of its initial ideas for a mid-term gas adequacy assessment, as well as the discussion on the revision of the current EU energy security framework, emphasising that market-based measures should be prioritised.

The Forum stresses the importance of clarifying the methodologies within this mid-term gas adequacy assessment. This work will continue in 2027, with a view to finalising the methodology and delivering a mid-term gas adequacy assessment framework that provides a robust, transparent and practical basis for supporting the EU's energy security objectives and enhancing system and market preparedness.

7.2.5 **ENTSOG PARTICIPATION IN THE SMART ENERGY EXPERT GROUP (SEEG)**

The EC has set up the “Smart Energy Expert Group” (previously the Smart Grids Task Force) led by the EC DG CNECT (DG Communications Networks, Content and Technology) and DG ENER (DG Energy). The Group’s tasks are to assist the EC in relation to the implementation of existing EU legislation, programmes, policies, among others. Three Working Groups have been created under the SEEG:

- ▲ **Data for Energy (D4E):** Build the European framework for sharing energy-related data.
- ▲ **Consumer Empowerment and Protection:** Bolster consumer engagement and empowerment.

▲ **Cybersecurity:** Provide recommendations and guidance to the EC on Cybersecurity for energy systems.

In 2025, ENTSOG was appointed as a member of the SEEG and received a direct invite from the EC to participate in the work and provide its expertise in two sub-groups, one for data exchange (D4E) and the other in cybersecurity. In cybersecurity, ENTSOG participates in two cybersecurity related sub-groups, namely the Cybersecurity information exchange SG and the EU legislation and standards in cybersecurity SG. This work is expected to continue in 2027.

7.2.6 **SEASONAL OUTLOOK SIMULATION RESULTS VISUALISATION DASHBOARD**

In 2026, ENTSOG launched a visualisation dashboard for Seasonal Outlook simulation results, to improve the accessibility and transparency of published analyses. This initiative supports ENTSOG’s digitalisation efforts by providing stakeholders with a clearer and more user-friendly way to explore key results.

In 2027, ENTSOG will focus on maintaining and further improving the existing Outlook visualisation dashboard, including usability enhancements, performance improvements, and updates based on operational experience and stakeholder feedback.



7.3 **PROGRAMME OF ACTIVITIES**

The following table shows the expected timeline and key activities.

Research and Development	2027											
	J	F	M	A	M	J	J	A	S	O	N	D
CO ₂ Project Progress Monitoring												
“Three Carriers Model” and “Interlinked Model”												
Hydrogen and Gas Quality assessment, including smart grid solutions												
Mid-term analysis framework												
ENTSOG participation in the Smart Energy Expert Group (SEEG)												
Seasonal Outlook simulation results visualisation dashboard												

■ Activity periods



8 ENTSOG SUPPORTING ACTIVITIES

8.1 OBJECTIVES

With the support of its Members and the guidance of its steering bodies, the Management Support team coordinates and supports the work of ENTSOG. It prepares, arranges, and coordinates the various General Assembly and Management Board Meetings and maintains an overview on all organisational activities. It is structured in various management support functions that work with the Brussels team but also directly with the Members. With a growing number of cross-organisational projects and interlinked activities, the Management Support team supports ENTSOG planning, management, and execution.

The Management Support team aims to establish and maintain the most efficient structure to support all organisational Business Areas (i. e., Market,

System Development, and System Operation) and the related working groups (WGs) and Task Forces (TFs). That includes the planning and development of financial and human resources but also the communication flow within the association and to its stakeholders.

ENTSOG will continue to internally evaluate the risks that present challenges to meet its objectives, activities, and deliverables, addressing regulatory, legal, finance and human resource aspects. Risk assessment and plans for proper mitigation measures will be supervised by ENTSOG's steering bodies.

A high-level overview of the main risks and associated mitigation measures are outlined in the table included in section 8.2.4.

8.2 KEY DELIVERABLES AND ACTIVITIES

8.2.1 LEGAL AND CORPORATE AFFAIRS

The ENTSOG Legal Team ensures compliance of ENTSOG with the applicable law and the regulatory framework while carrying out its missions. It undertakes the day-to-day activities of the Association from the legal perspective as well as supporting activities undertaken by the different Business Areas and their respective WGs.

In 2027, this support will continue with respect to the implementation of the existing NCs and in some cases effect monitoring. The Legal Team will in particular support WGs and TFs established or to be established with the aim to implement/interpret EU Regulation 2024/1789.

The Legal Team will also continue to facilitate the meetings and the activities of the EU-UK Gas TSOs Task Force, which was created in 2021 as the interface between ENTSOG and the UK TSOs. This is upon request of the EC and the UK Government in accordance with the Trade and Cooperation agreement concluded by the EU and the UK following the Brexit. The main goal of this Task Force is to ensure further cooperation between the EU and the UK TSOs.

To address the legal issues arising in the meetings of the ENTSOG Working Groups, the Legal Team coordinates the activities of the Legal Advisory Group (LAG), which convenes for monthly meetings. The LAG is the ENTSOG legal working group composed of ENTSOG members' representatives from legal staff of the TSOs.

On a day-to-day basis, the Legal and Management support teams provide legal assistance and advice to the management, the Board and the General Assembly in terms of governance. The Legal Team is also ensuring the compliance of the Association with national law applicable to companies and associations.

The Legal and Management support teams may be required in 2027 to assist the Association in adjusting ENTSOG statutes and ways of working to meet the needs of the changing EU law, as needed.

On a day-to-day basis, the Legal and Management support teams provide legal assistance and advice to the management, the Board and the General Assembly in terms of governance. The Legal Team is also ensuring the compliance of the Association with national law applicable to companies and associations.

The Legal and Management support teams may be required in 2026 to assist the Association in adjusting ENTSG statutes and ways of working to meet the needs of the Hydrogen and Decarbonised Gas Market Package, as needed.

8.2.2 FINANCE AND HR

8.2.2.1 Finance

ENTSG is an international non-profit association (AISBL) established according to Belgian law. The highest decisive body of ENTSG is the General Assembly which meets four times a year. ENTSG is financed by its Members. The member TSOs contribute to the budget according to the number of kilometres of gas grid, population of the country and in some cases to special EU Grid connection significance.

With regards to financial reporting, ENTSG created and implemented clear and efficient accounting procedures and controls.

In 2010, a Financial Committee has been established, and the main tasks of the Committee are as follows:

- ▲ checking the compliance with local laws and obligation
- ▲ advising on the association's Budget
- ▲ validating the closure of the accounting year and balance sheet
- ▲ reporting on a quarterly basis to the Board and General Assembly on account situation

Financial Committee meetings are held five times per year.

8.2.2.2 Human Resources

To fulfil all tasks and deliverables a well-prepared recruitment plan needs to be in place so that ENTSG will have the relevant resources and competences to perform the requested activities.

By the end of 2026, the ENTSG Team in Brussels consists of forty-one persons and a resource plan is in place to prepare for replacement of seconded persons whose contracts expire. ENTSG is comprised of:

- ▲ Seconded staff from its members – typically seconded for 3–5 years,
- ▲ Direct employees, and
- ▲ External consultants

The ENTSG staff consists currently of 17 different nationalities and representing 10 companies, which provides a unique and challenging international working environment.

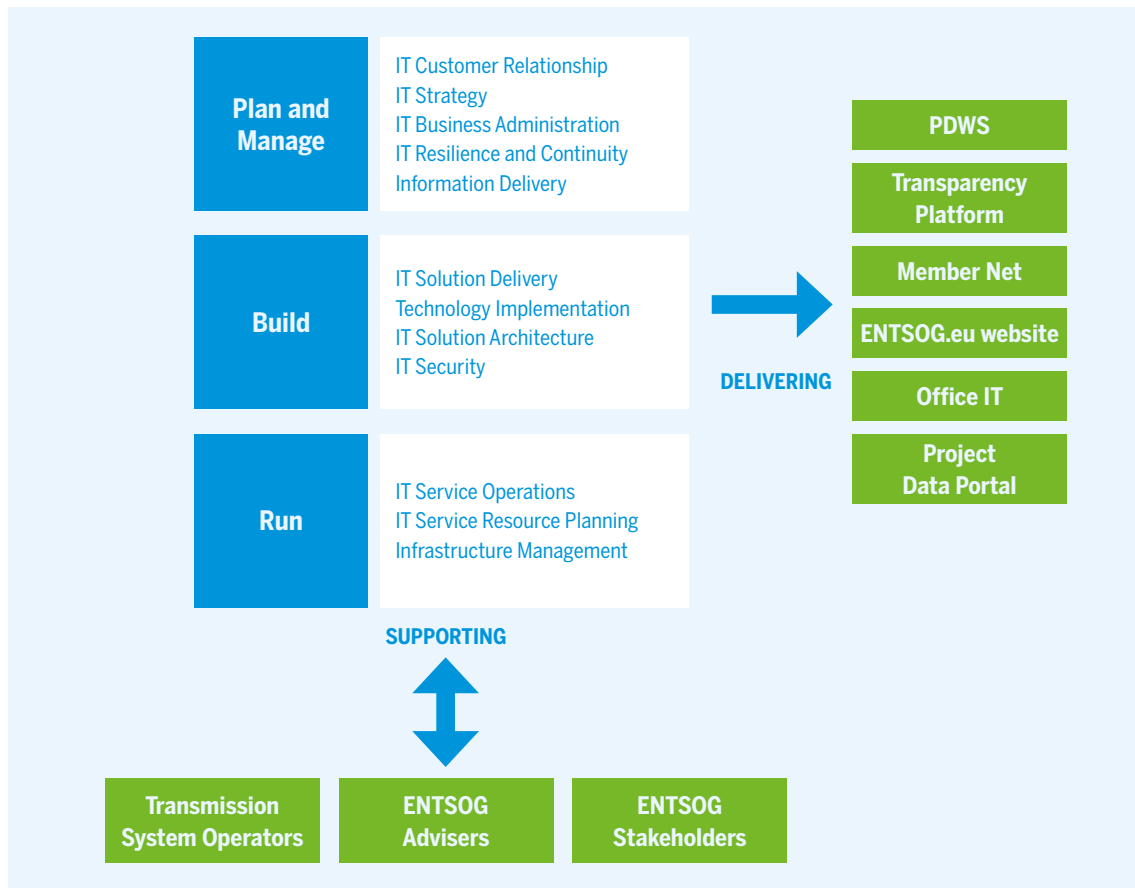
Key responsibilities of the Adviser role include leadership and support for internal work groups, external workshops and meetings, as well as participation in processes led by the EC, ACER and other European authorities.

ENTSG has a strong focus on the resource allocation as well as the relevant hand-over processes to ensure the performance of the organisation vis-à-vis the required deliverables. Systematic planning of resources replacement and knowledge transfer allows for the mitigation of risks which may affect the business continuity of the association.

ENTSG Staff	31.12.2025	31.12.2026
General Director	1	1
Directors	3	3
Managers/Advisers	34	33
Senior Assistants	3	3
Junior Assistant	1	1
Total	42	41

8.2.3 INFORMATION TECHNOLOGY (IT)

The ENTSOG IT team provides IT support and services to the ENTSOG team (i. e., management and the Business Areas), its members and other ENTSOG stakeholders (e. g., ACER, the EC). The figure below outlines the key delivery and support activities which are the responsibility of the IT team.



Working with several IT providers, vendors and IT contractors, the IT team plans, manages, builds, and operates IT systems to support ENTSOG advisors and their activities; they also provide IT support to ENTSOG stakeholders in the use of ENTSOG's data and systems.

The ENTSOG IT systems include:

- ▲ Professional Data Warehouse (PDWS) (including a Data Portal for reporting)
- ▲ Portal for Projects Data Collection used for TYNDP and PCI
- ▲ [Transparency Platform \(TP\)](#)
- ▲ Azure Data Factory used for:
 - Modelling Database for SysDev team
 - Reporting purposes for SysOp team
- ▲ Content Management Solution (Membernet and external sites) using SharePoint

▲ [ENTSOG Website](#)

- ▲ ReCo 2.0
- ▲ PLEXOS tool for simulations
- ▲ DEPT tool for tariffs publications
- ▲ ETM tool (Energy Transition Model) used in collaboration with ENTSO-E
- ▲ Office IT – Network, Laptops, Mobile phones, Conferencing Audio-Video, etc.
- ▲ Azure cloud infrastructure for the multiple internal tools and projects

Following a review of its IT systems in 2019, ENTSOG will continue the replacement/upgrade of ENTSOG's IT assets in the coming years to deliver secure, integrated, and cost-effective IT solutions for ENTSOG. The targeted services for these upgrades in 2021 and 2022 were the TP, PDWS and ArcGIS systems.

In 2023 and 2024 ENTSOG added to its technology stack tools, such as PLEXOS, Energy Transition Model (ETM). While in 2025 ENTSOG migrated from QGIS to ESRI ArcGIS.

The main challenge for 2027 and 2028 in terms of IT projects are the new provisions on the authorisation and supervision of Registered Reporting Mechanisms (RRMs) and Inside Information Platforms (IIPs) introduced by the EC Delegated Regulation (EU) 2026/255.

It is expected that this will bring a lot of complex changes to the TP and Data Warehouse in addition to the data exchange and communication channel with ACER.

For 2027 ENTSOG will focus on tools such as Azure Data Factory and Power BI.

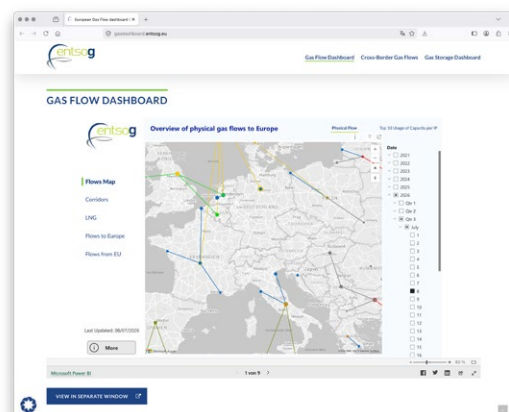
- ▲ The technologies behind the TP were upgraded in 2025–2026 and new improvements will be added in 2027.
- ▲ One of the purposes of PDWS is the reporting feature. Currently we are using Data Factory and Power BI for various needs and projects. Improvements and development will continue in 2027.
- ▲ A project delivered in 2025 was the SharePoint upgrade of the Data Portal. ENTSOG will fine-tune the release, and new functionalities will be applied during 2027.
- ▲ In 2022–2023 the development of the Modelling Database commenced by using Azure Data Factory. This was continued in 2023–2024 by using PLEXOS for the simulations. ADF is also used by the System Operation team for reporting and dashboard purposes starting in 2024 and continued through 2027.

▲ For the office IT, ENTSOG has a complete cloud-based infrastructure, including both servers and devices. In 2026 various upgrades and improvements to the infrastructure have been undertaken. For 2027 the focus will be on security and AI improvements in addition to cost optimisation.

▲ The development of ReCo 2.0 commenced in late 2021 and continued throughout 2022–2024 for its different phases. In 2027, ENTSOG will evaluate the solution built so far with some new functionality.

▲ A joint project with ENTSO-E requires the use of the solution called Energy Transition Model (ETM).

▲ In 2027, ENTSOG will further refine the data, design and improve usability aspects of European Gas Flow Dashboard website⁹ which covers gas flows (based on the ENTSOG Transparency Platform) and storage data (based on GIE Aggregate Storage Inventory platform).



8.2.4 RISK AND MITIGATION

ENTSOG strives to meet challenges and potential risks on an ongoing basis. The core ENTSOG organisational structure, with the flow of information between the ENTSOG Members, Board and General Assembly ensures that the correct mechanisms are in place to anticipate in advance any potential risks. ENTSOG Working Group, Task Force and Standing group meetings occur at minimum monthly, and *ad hoc* as needed. In addition, ENTSOG maintains close and continuous interaction with ACER and the EC, reflecting that ENTSOG's activities are embedded in Regulation (EU) 2024/1789 and other relevant legislative frameworks.

ENTSOG and ACER's NC FUNC Process allows for the identification by market participants of the effectiveness of the implementation of the NCs, thereby allowing full transparency, monitoring, and a formal process for identification and reaction to any relevant issues.

As outlined in Section 7 (Research and Development) of this report, and included in each edition of the AWP, the tools, methodologies, stakeholder engagement processes and IT solutions to address potential difficulties and risks to performance and to improve our way of working.

⁹ <https://gasdashboard.entsog.eu/>

Additionally, ENTSOG will continue to internally evaluate the risks that present challenges to meet its objectives, activities and deliverables, addressing regulatory, legal, finance and human resource aspects. Risk assessment and plans for proper mitigation measures will continue to be supervised by ENTSOG's steering bodies. ENTSOG aims to minimise unnecessary costs to the Association that would be incurred through additional risk

assessment undertaken by external consultants. With the formal establishment of ENNOH, ENTSOG will support, as needed, the work undertaken by the hydrogen transmission network operators and the ENNOH team.

The table below outlines the key mitigation measures implemented by ENTSOG to address the potential risks identifies.

Category	Risk	Mitigation
Regulatory/legal	Possible inadequacy between the regulatory framework in place and the ENTSOG's objectives, tasks and deliverable	▲ ENTSOG, as AISBL, works under Belgian law. The legal team of ENTSOG has been cooperating with Belgian Notary and other Belgian Officials/authorities. ▲ Adherence to ENTSOG's Article of Association and related Rules of Procedures, following opinions issued by ACER and the EC. ▲ Oversight by ACER of ENTSOG's regulatory tasks, as outlined by Regulation (EU) 2024/1789. ▲ Constant legal monitoring to review, application and implementation of any additional/new pieces of legislation to which ENTSOG may be subject, e. g., updated energy security framework and TEN-E Regulation, and new CO₂ transport and market legislation.
Finance/ budgeting	Underestimated budget in place to achieve ENTSOG's objectives, tasks, deliverables	▲ Finances evaluated frequently by ENTSOG Finance committee, comprising ENTSOG members. The Finance committee meets five times per year. ▲ The status of finance evaluation reported, on quarterly basis, to Members to ensure a constant monitoring. ▲ External publication of a detailed Financial Statement in ENTSOG Annual Report, which includes comparison of the assets, liabilities and equities, and income sources with the previous year. Any potential negative risk is being evaluated and addressed based on the trends presented. ▲ Yearly submission of Financial Statements to National Belgium Bank in accordance with Belgian accounting rules.
Resource allocation	Inadequate resource allocation to achieve ENTSOG's objectives, tasks, deliverables	▲ Secondment principal applied – personnel coming from TSOs ▲ Systematic planning in advance of personnel replacement ▲ Internal processes to ensure knowledge transfer within the Business Areas ▲ Annual outlook and analysis of recruitment needs prepared and addressed to Members on bi-annual basis
IT/Cyber security	Inadequate IT resources/systems in place to achieve ENTSOG's objectives, tasks, deliverables	▲ Frequent planning for replacement/upgrade of ENTSOG IT resources and infrastructure to deliver secure, integrated, and cost-effective IT solutions ▲ Anti-malware and cyberattack protection training campaigns rolled out to ENTSOG Brussels team on a regular basis ▲ Update of hardware and software to ensure IT security ▲ Audit of infrastructure and policies put in place ▲ Constant monitoring of traffic activities for email and SharePoint ▲ Knowledge transfer between personnel for back up in case of absences ▲ Volatile and increased prices for both software and hardware due to various external factors (e. g. chip/memory shortage, global politics, etc.)



9 ANNEX: OVERVIEW OF ENTSOG's REGULATORY FRAMEWORK FOR ITS TASKS

The tasks entrusted to ENTSOG derive mainly from the following pieces legislation¹⁰:

Regulation of the European Parliament and of the Council on the internal markets for renewable gas, natural gas and hydrogen, amending Regulations (EU) No 1227/2011, (EU) 2017/1938, (EU) 2019/942 and (EU) 2022/869 and Decision (EU) 2017/684 and repealing Regulation (EC) No. 715/2009 (also known as the Hydrogen and Decarbonised Gas Market Regulation (EU) 2024/1789):

- ▲ elaboration of NCs;
- ▲ adoption of:
 - I. common network operation tools (CNOTs);
 - II. a non-binding Union-wide ten-year network development plan (TYNDP) including a European supply adequacy outlook;
 - III. recommendations relating to the coordination of technical cooperation between Union and third country TSOs;
 - IV. recommendations to TSOs on their technical cooperation with distribution system operators and hydrogen network operators;
 - V. an AWP;
 - VI. an annual report;
 - VII. annual summer and winter supply outlooks;
 - VIII. an annual report including the quantity of renewable gas and low-carbon gas injected into the natural gas network
- ▲ obligation of monitoring and analysing the implementation of NCs and the GLs adopted by the EC and their effect on the harmonisation of applicable rules aimed at facilitating market integration.
- ▲ views to the EC on the adoption of the GLs, upon request of the latter institution;
- ▲ ENTSOG shall make available all information required by ACER to fulfil its tasks.
- ▲ All TSOs shall cooperate at Union level through ENTSOG in order to promote the completion and functioning of the internal market for natural gas and cross-border trade and to

ensure the optimal management, coordinated operation and sound technical evolution of the natural gas transmission network;

- ▲ TSOs shall establish regional cooperation within the ENTSOG to contribute to the accomplishment of some of its tasks;
- ▲ ENTSOG shall, following its assessment, provide an opinion on the cessation of activities of underground natural gas storage facilities;
- ▲ Until 1 January 2027, develop the 2026 Union-wide network development plan for hydrogen.

Regulation (EU) No. 1227/2011 of 25 October 2011 on wholesale energy market integrity and transparency (REMIT)

- ▲ market participants, or a person or an entity acting on their behalf (as ENTSOG), shall provide the Agency with a record of wholesale energy market transactions and information related to the capacity and use of transmission of natural gas, including planned or unplanned unavailability of those facilities, and with inside information that is publicly disclosed pursuant to Art. 4, for the purpose of monitoring trading on wholesale energy markets (Art. 8);
- ▲ cooperation at Union level foreseen (Art. 16);

EC Regulation (EU) No 312/2014 of 26 March 2014 establishing a NC on Gas Balancing of Transmission Networks (the BAL NC)

- ▲ ENTSOG shall monitor and analyse the implementation of the BAL NC and its effects on the harmonisation of applicable rules aimed at facilitating market integration, in accordance with Art. 26(7) and (8) of Regulation (EU) 2024/1789.
- ▲ ENTSOG shall support ACER in its implementation monitoring activities by ensuring the completeness and correctness of relevant information provided by TSOs.

¹⁰ This non-exhaustive list is only listing the pieces of legislation in force at the time of drafting this report.

Congestion Management Procedures Guidelines (the CMP GLs) established by EC Decision 2012/490/EU of 24 August 2012 amending Annex I to Regulation (EC) No. 715/2009

- ▲ ENTSOG shall monitor and analyse the implementation of the CMP GLs and their effects on the harmonisation of applicable rules aimed at facilitating market integration, in accordance with Art. 26(7) and (8) of Regulation (EU) 2024/1789.
- ▲ ENTSOG shall support ACER in its implementation monitoring activities by ensuring the completeness and correctness of relevant information provided by TSOs.

EC Implementing Regulation (EU) No. 2026/256 of 30 January 2026 on data reporting implementing Art. 7c(2), Art. 8(1a), Art. 8(2) and Art. 8(6) of Regulation (EU) No. 1227/2011, as (REMIT Implementing Act)

- ▲ ENTSOG shall, on behalf of TSO, report information to ACER in relation to the capacity and use of facilities for transmission of natural gas including planned and unplanned unavailability of these facilities, through the Union-wide central platform (commonly known as ENTSOG TP) (Art. 12 (1));
- ▲ ENTSOG is obliged to make the said information available to ACER as soon as it becomes available on its TP (Art. 12).

EC Regulation (EU) No. 703/2015 of 30 April 2015 establishing a network code on interoperability and data exchange rules (the INT NC)

- ▲ ENTSOG should monitor and analyse the implementation of this Reg. and report its findings to ACER for allowing the institution to fulfil its tasks (Recital 10);
- ▲ TSOs shall communicate to ENTSOG the mandatory terms of interconnection agreements or any amendments thereof concluded after the entry into force of this Reg. within 10 days after their conclusion or amendment (Art. 4);
- ▲ by 30 June 2015, ENTSOG shall develop and publish a draft interconnection agreement template covering the default terms and conditions set out in the Reg. (Art. 5);
- ▲ taking into account the opinion provided by ACER, ENTSOG shall publish on its website the final template by 31 December 2015 (Art. 5);

- ▲ ENTSOG shall publish on its TP a link to the websites of the TSOs with reference to the Wobbe-index and gross calorific value for gas directly entering their transmission networks for each interconnection point (Art. 16);
- ▲ ENTSOG shall publish every two years a long-term gas quality monitoring outlook for transmission systems (aligned with the TYNDP) in order to identify the potential trends of gas quality parameters and respective potential variability within the next 10 years (Art. 18);
- ▲ For each data exchange requirement, ENTSOG shall develop a CNOT and publish it on its website (Art. 24);
- ▲ ENTSOG shall establish a transparent process for the development of all CNOTs (Art. 24);
- ▲ Where a potential need to change the common data exchange solution is identified, ENTSOG on its own initiative or on the request of ACER, should evaluate relevant technical solutions and produce a cost-benefit analysis of the potential change(s) (Art. 21);
- ▲ By 30 September 2016 at the latest, ENTSOG had to monitor and analyse how TSOs have implemented Chapters II to V of this Reg. TSOs were obliged to send the relevant information before 31 July 2016 (Art. 25).

Regulation (EU) 2022/869 of the European Parliament and of the council of 30 May 2022 on Guidelines for Trans-European Energy Infrastructure, amending Regulations No. (EC) 715/2009, (EU) 2019/942 and (EU) 2019/943 and Directives 2009/73/EC and (EU) 2019/944, And Repealing Regulation (EU) No. 347/2013 (TEN-E Regulation)

- ▲ Involvement of ENTSOG in the preparation of an interlinked model (for the TYNDP) to be developed together with ENTSO-E and ENNOH
- ▲ Involvement of ENTSOG in the preparation of joint scenarios (for the TYNDPs) to be developed together with ENTSO-E and ENNOH
- ▲ Involvement of ENTSOG in the preparation of the Infrastructure Gaps Identification (IGI) report and project-specific cost-benefit analyses of hydrogen PCI and PMI candidates (for the TYNDP 2024 and TYNDP 2026) to be developed together with ENNOH.

Regulation (EU) 2017/1938 of 25 October 2017 of the European Parliament and of the Council concerning measures to safeguard the security of gas supply and repealing Regulation (EU) No. 994/2010 (the “SOS Regulation”¹¹)

- ▲ Obligation for ENTSOG to perform an EU-wide gas supply and infrastructure disruption simulation in order to provide a high-level overview of the major supply risks for the EU
- ▲ Participation in the Gas Coordination Group
- ▲ Obligations for the TSOs, in the event of a regional or Union emergency, to cooperate and exchange information using the ReCo System for Gas established by ENTSOG.

EC Regulation (EU) 2017/459 of 16 March 2017 establishing a network code on capacity allocation mechanisms in gas transmission systems and repealing Regulation (EU) No. 984/2013 (the CAM NC)

- ▲ ENTSOG is required to publish the auction calendar (by January of every calendar year for auctions taking place during the period of March until February of the following calendar year) (Art. 3);
- ▲ ENTSOG had facilitated the establishment of joint booking platforms (Art. 37).
- ▲ ENTSOG was involved in a process by which terms and conditions of TSOs across the Union for bundled capacity products should be assessed and aligned to the extent possible, with a view to creating a common template of terms and conditions (Recital 10);
- ▲ within nine months from the entry into force of this Regulation ENTSOG shall, after consulting stakeholders, review and create a catalogue of the applicable main terms and conditions of the transport contract(s) of the TSOs in relation to bundled capacity products (Art. 20);
- ▲ In particular, ENTSOG shall analyse existing transport contracts, identifying and categorising differences concerning the main terms and conditions and the reasons for such differences and publish its findings in a report (Art. 20);
- ▲ On the basis of the said report, ENTSOG shall develop and publish a template for the main terms and conditions, covering contractual provisions which are not affected by fundamental differences in principles of national law or jurisprudence, for the offer of bundled capacity products (Art. 20);

- ▲ No later than three months after receiving the ACER’s opinion, ENTSOG shall publish on its website the final template for the main terms and conditions (Art. 20);
- ▲ ENTSOG had to finalise at the latest by 1 October 2017, after consulting stakeholders and ACER, a conversion model for existing transport contracts in case of network users holding mismatched unbundled capacity at one side of an interconnection point. This because a free-of-charge capacity conversion service shall be offered by TSOs as from 1 January 2018 (Art. 21);
- ▲ ENTSOG shall coordinate and assist the completion of the demand assessment reports including by providing a standard template and publishing the reports on ENTSOG’s website (Art. 26);
- ▲ In order to assist ACER in its implementation monitoring, ENTSOG shall monitor and analyse how TSOs have implemented the new version of CAM in accordance with Art. 26(7) and (8) of Regulation (EU) 2024/1789. In particular, ENTSOG shall ensure the completeness and correctness of all relevant information from TSOs. ENTSOG shall submit to ACER that information by 31 March 2019 (Art. 38).
- ▲ ENTSOG shall monitor and analyse effects of NCs and the GLs on the harmonisation of applicable rules aimed at facilitating market integration in accordance with Art. 26(7) and (8) of Regulation (EU) 2024/1789.

EC Regulation (EU) 2017/460 of 17 March 2017 establishing a network code on harmonised transmission tariff structures for gas (the TAR NC)

- ▲ in order to assist ACER in its implementation monitoring, ENTSOG shall monitor and analyse in accordance with Art. 26(7) and (8) of Regulation (EU) 2024/1789 how transmission system operators have implemented the TAR NC. In particular, ENTSOG shall ensure the completeness and correctness of all relevant information provided by transmission system operators. ENTSOG shall submit to ACER that information in accordance with deadlines set out in the TAR NC (Art. 36);
- ▲ provide feedback on the template that ACER shall develop for the consultation document (Art. 26).

11 as amended by Regulation (EU) 2022/1032 of the European Parliament and the Council of 29th June 2022 amending Regulations (EU) 2017/1938 and (EC) No 715/2009 with regard to gas storage.

10 ABBREVIATIONS

	Definition		Definition
ACER	Agency for the Cooperation of Energy Regulators	GQ	Gas Quality
API	Application Programming Interface	GQO	Gas Quality Outlook
AWP	Annual Work Programme	GQS	Gas Quality Study
BAL NC	Network Code on Gas Balancing	GRIP	Gas Regional Investment Plan
BRS	Business Requirements Specifications	HNO	Hydrogen Network Operator
CAM NC	Network Code on Capacity Allocation Mechanisms	IA	Interconnection Agreement
CBA	Cost-Benefit Analysis	ICM	Industrial Carbon Management
CCUS	Carbon, Capture, Utilisation and Storage	IGI	Infrastructure Gaps Identification
CEN	European Committee for Standardisation	ILM	Interlinked Model
CIO	Central Issuing Office	IMR	Implementation Monitoring Report
CMP GL	Congestion Management Procedures Guidelines	INT NC	Network Code on Interoperability and Data Exchange Rules
CNOT	Common Network Operations Tools	IP	Interconnection Point
DSO	Distribution System Operator	IPP	Innovative Projects Platform
EASEE-gas	European Association for the Streamlining of Energy Exchange – gas	KG	Kernel Group
EC	European Commission	LAG	Legal Advisory Group
ECP	External Contact Platform	MS	Member States
EIC	Energy Identification Code	NC	Network Code
ETM	Energy Transition Model	NC IMG	Network Code Implementation and Monitoring Group
ENNOH	European Network of Network Operators for Hydrogen	PCI	Projects of Common Interest
ENTSO-E	European Network of Transmission System Operators for Electricity	PDWS	Professional Data Warehouse System
ENTSOG	European Network of Transmission System Operators for Gas	PMI	Projects of Mutual Interest
ESI	Energy System Integration	RDI	Research, Development, and Innovation
ETR	Energy Transition Related	ReCo	Regional Cooperation
EU	European Union	REMIT	Regulation on Energy Market Integrity and Transparency
GCG	Gas Coordination Group	RSS	Really Simple Syndication
GERG	European Gas Research Group	SoS	Security of Supply
GIE	Gas Infrastructure Europe	SRG	Stakeholder Reference Group
GIS	Geographic Information System	TP	Transparency Platform
GLs	Guidelines	TF	Task Force
		TAR NC	Network Code on Harmonised Transmission Tariff Structures for Gas
		TSO	Transmission System Operator
		TYNDP	Ten-Year Network Development Plan
		WG	Working Group

Publisher: ENTSOG AISBL
Avenue de Cortenbergh 100
1000 Brussels, Belgium

Cover picture: Courtesy of Desfa

Design: DreiDreizehn Werbeagentur GmbH, Berlin | www.313.de



ENTSOG AISBL
Avenue de Cortenbergh 100 | 1000 Brussels, Belgium
Tel. +32 2 894 51 00

info@entsog.eu | www.entsog.eu