

## implementing the internal market for gas

## ENTSOG – A FAIR PARTNER TO ALL!

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# 1

# Introduction

Background

Executive Summary of ENTSOG's Activities in 2018

Image courtesy of Gasum





# Background

ENTSOG was created in December 2009 and entrusted with preparatory work prior to the implementation of the European Union's Third Energy Package.

On 3 March 2011 ENTSOG formally submitted its articles of association, rules and list of members to the European Commission (EC) and Agency for the Cooperation of Energy Regulators (ACER). The final Articles of Association and Rules of Procedure were approved by the General Assembly on 6 March 2012 and submitted to ACER and EC.<sup>1)</sup>

This document represents the 2018 edition of the Annual Work Programme (AWP) in accordance with Regulation 715/2009 and as a part of the EU's Three-Year Plan agreed upon by EC, ACER and ENTSOG and based on consultation between stakeholders. An Annex was added to provide an overview of the legal basis for ENTSOG's primary tasks.

The Three-Year Plan will be subject to continuous development and will provide stakeholders with a plan of actions to be performed over the upcoming years. This allows all interested parties to plan for and secure the resources required to implement the actions given in the plan and to finalise the internal market.

The activities of ENTSOG in 2018 will be in line with the Three-Year-Plan for gas. Based on a significantly improved TYNDP, ENTSOG will provide the platform for a level-playing field and in-depth assessment of Projects of Common Interest. Seasonal supply outlooks will assess the flexibility offered by the gas infrastructure. With the publication of the newly proposed Security of Supply regulation, ENTSOG commenced an analysis of the potential impact on its work. Together with its members (the certified European Gas Transmission System Operators – TSOs), ENTSOG will perform an EU-wide assessment of potential disruption scenarios.

These examples demonstrate that the work at ENTSOG has changed in recent times. Having developed most of the requested gas network codes and initially concentrating on monitoring their implementation, ENTSOG will going forward have a stronger focus on monitoring the effects and the progress on the functionality of the European gas markets.

In order to continuously improve its way of working and developing its relations with key stakeholders, ENTSOG has established a process of evaluating and responding to feedback received from ACER. This process aims at more systematic, constant dialogue between ENTSOG and ACER in which both sides better understand how and by when it may be possible to accommodate the recommendations.

And finally, in 2018, ENTSOG will continue its work as a proactive, trusted adviser on gas transmission related topics on European level. The structure of ENTSOG with the embedded expertise of its members as well as of its Brussels office will continue to play a pivotal role in the further development of the European gas markets.

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1) The Articles of Association and the Rules of Procedure were last updated in October 2014 and December 2012 respectively.



# Executive Summary of ENTSOG's Activities in 2018

Previous editions of the Annual Work Programme have focused on the development process of the Third Package network codes, a cornerstone of the organisation's activities. The focus will gradually change in the next phases where ENTSOG will continue to provide support during all processes associated with the implementation activities.

Going forward, ENTSOG's efforts will be on continued monitoring of the implementation and effects of the CMP Guidelines, Capacity Allocation Methodologies (CAM NC), Tariff (TAR NC) Balancing (BAL NC) and Interoperability (INT NC) – the regulatory references for these are included in the Annex. In addition to these, additional activities will be undertaken in 2018 by each Business Area in ENTSOG, some of which are summarised in the following sections. More detail on all Business Area activities is provided in Sections 2 to 4 and detail on General and IT activities is provided in Sections 5 and 6 of this report.

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## **MARKET**

For the established Joint ACER and ENTSOG Functionality Process the scope of the process will be developed further- not only to deal with potential adjustments to the implementation of network codes but also to include possible issues which might require future network code adaptations. Further work is expected in assisting the Energy Community in NC implementation workshops and queries. Documents and solutions derived from the CAM NC and TAR NC will be developed by the Market team. An update of the CAM/CMP and BAL Business Requirements Specification (BRS) may also be required.

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## **SYSTEM DEVELOPMENT**

Work will be required to develop the supply and demand scenarios, to model the integrated network, to inform the investment process and to support the PCI selection process and assessment of the European security of supply. Some of the key documents to be published in this Business Area include an updated CBA methodology, the TYNDP 2018, the Summer and Winter Supply Outlook and Review for 2018 and the printed and on-line maps for Capacity (2018) and for System Development (2017/2018). Continued improvement of ENTSOG's modelling tool will also contribute to the workload in 2018.

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## **SYSTEM OPERATION**

Activities in this Business Area relate to transparency and interoperability. From a transparency perspective, work will be undertaken to enhance the functionality of the Transparency Platform and support will be provided to the TSOs to improve data quality and achieve REMIT requirements. Interoperability work includes the development, support and maintenance of common network operation tools (CNOTs) for data exchange. This team will also facilitate the ongoing processes related to gas quality standardisation. Continued improvement of ENTSOG's analysis tools will also contribute to the workload in 2018.

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## GENERAL AREA

In 2018 the General Area will continue to provide support to the Business Areas and management in Brussels, and work with ENTSOG members. Support will be through the Legal, HR, Finance, IT and Communications functions to ensure there is a robust platform for the activities and deliverables of ENTSOG's Business Areas.

The General Area is also responsible for the meetings of the General Assembly and the Board as well as coordinating ENTSOG's publications, e.g., Annual Report and Annual Work Programme. In addition, the activities of the Liaison Group, the Legal Advisory Group and the Financial Committee are organised by the General Area.

Even though the General Area is responsible for coordination of the Annual Report and Annual Work Programme (AWP) these publications are the result of combined efforts from the entire ENTSOG team - the Annual Report assesses ENTSOG's work and achievements retrospectively for each given year and provides an opportunity for comparing the delivered results against the AWP. The ENTSOG AWP contains the expected activities for ENTSOG in the upcoming year, is aligned with the European Commission's (EC's) Three Year Plan, takes into account the ACER opinions on ENTSOG's work and allows the interested stakeholders to prepare their activities vis-à-vis ENTSOG.

ENTSOG's Article of Association and Rules of Procedure will regularly be reviewed, in order to adapt and streamline the current processes to the experience of activity carried out in the past years as well as the expectations for the upcoming years.



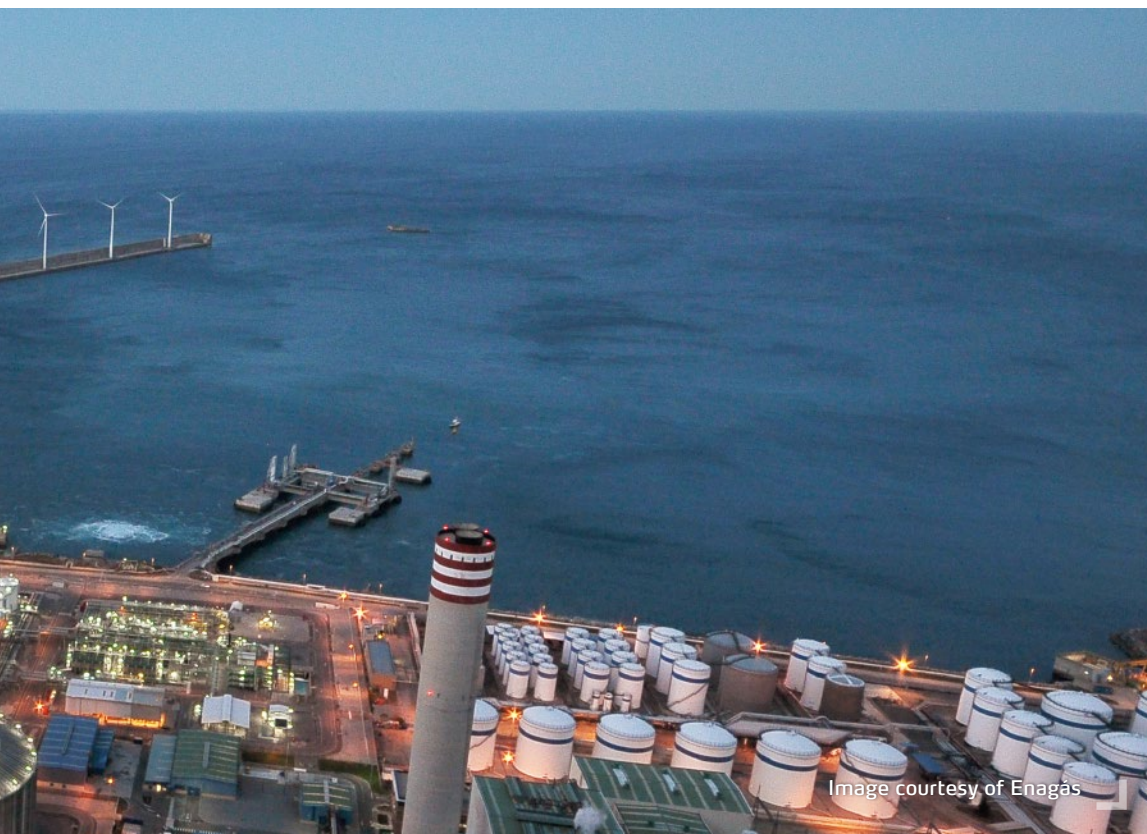


## OTHER ACTIVITIES

ENTSOG activities have evolved over the years and in some cases, input for an activity is required from more than one Business Area. Such activities may involve, for instance, preparation of content for conferences and forums, e.g., the Madrid Forum and Copenhagen Energy Infrastructure Forum, both hosted by the European Commission. The Madrid Forum addresses topics such as the implementation of the network codes and the cross-border trade of gas, while the Copenhagen Energy Infrastructure Forum addresses the different aspects of infrastructure planning and development.

The European Commission is also requesting ENTSOG to participate in different group settings, such as the Gas Coordination Group (GCG), established by Regulation (EU) 994/2010. The GCG facilitates the coordination of measures concerning security of gas supply (SoS) and requires input from both the System Development and System Operation teams. In the context of the revision of Regulation (EU) 994/2010, ENTSOG established a dedicated SoS Task Force (SoS TF). With this overarching business-area SoS TF, and in close cooperation with the GCG, ENTSOG will provide the results of the first Union-wide simulation on supply and infrastructure disruption scenarios by November 2017 (as mentioned in the AWP 2017). Based on those results and as mentioned in the revised SoS Regulation, ENTSOG will be further tasked with SoS activities in 2018. More specific information is provided in respective sections in this report for System Development and System Operation.

The European Commission is in the process of establishing the Implementation and Monitoring Group which will deal with high level issues in relation to implementation and monitoring of network codes for both gas and electricity. A strong focus can be expected on the implementation of the electricity network codes, but also gas related issues will be addressed and will require the efforts of ENTSOG.





ENTSOG Project Plan

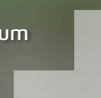
# 2 Market Business Area

Capacity Activity

Balancing Activity

Tariff Activity

Image courtesy of Gasum





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## OBJECTIVES

- ▲ To support the implementation and application of the Capacity Allocation Mechanisms network code (CAM NC) and the Congestion Management Procedures (CMP)
- ▲ To monitor and analyse the implementation of the CAM NC and CMP and their effect on the harmonisation of applicable rules aimed at facilitating market integration
- ▲ To facilitate activities to promote the functionality of CAM NC and CMP in close dialogue with stakeholders
- ▲ To develop documents/solutions stemming from the EC 459/2017 CAM NC

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## BACKGROUND

The CMP have entered into force and most aspects of the rules are implemented by October 2013, some by July 2016.

The CAM NC entered into force November 2013. The implementation deadline was November 2015. The amended CAM NC entered into force on 6 April 2017.

The Capacity workgroup will support these activities and will continue to provide assistance to other ENTSOG streams, in order to ensure a consistent approach regarding capacity issues when designing future network codes or amendment proposals covering different but interlinked areas.

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## KEY DELIVERABLES FOR 2018

- ▲ CAM NC Monitoring/Reporting
- ▲ CMP Monitoring/Reporting
- ▲ CAM NC Auction Calendar
- ▲ Develop a template to align the main categories of capacity contracts and TSOs' General terms and conditions
- ▲ Update of Business Requirements Specification (BRS) CAM/CMP if requested by TSO/Stakeholders
- ▲ Recommendations resulting from the joint ACER and ENTSOG functionality process involving stakeholders (CAM NC, CMP BAL NC, TAR NC and INT NC)

## PLAN

The following table shows the expected timeline and key activities on Capacity/CMP related issues for 2018. Ongoing work in 2017 and deliverables due in 2019 which are related to these activities are not shown in the table.

CAPACITY ACTIVITY	2018											
	J	F	M	A	M	J	J	A	S	O	N	D
<b>CAM NC</b>												
CAM NC auction calendar												
CAM NC monitoring report (implementation and effects) for Annual Report 2017 and 2018												
Support of Energy community in implementing CAM NC and CMP GL												
CAM BRS update (if requested by TSO/Stakeholders)												
Functionality process for CAM NC												
Monitor the activities and develop ENTSOG positions on capacity relevant issues incl. responses on public consultations												
Analyses of ACER reports (implementation monitoring, Progress of capacity bundling, Regional Initiatives Status Review Report) and other capacity relevant reports												
Development of a Template for aligned main categories of capacity contracts and GT & Cs												
Incremental Capacity – support of TSOs with the 1st INC process												
<b>CMP GUIDELINES</b>												
Monitoring report (implementation and effects) for 2017 and 2018 Annual Report												
Functionality process for CMP												
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 on public consultations												
Potential development of changes/amendments or support to other network codes												

Activity periods

Key deliverables visible to external stakeholders

Uncertain workload

Blue cells on the chart denote activity periods with green cells denoting key deliverables visible to external stakeholders. Orange cells denote uncertain workload. Other coloured cells denote non-ENTSOG activity.



# Balancing Activity

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## OBJECTIVES

- ▲ To monitor and analyse the implementation of the Balancing Network Code (BAL NC) and its effect on the harmonisation of applicable rules aimed at facilitating market integration
- ▲ To support and assist in the implementation of the BAL NC in terms of Regulation interpretation by relevant EU bodies as well as via knowledge sharing and good practices dissemination which might include assisting the Energy Community in implementing the BAL NC.
- ▲ To facilitate activities to promote the functionality of the BAL NC in dialogue with stakeholders.
- ▲ To propose or assist the development of any modification proposals or Business Requirement Specifications (BRS) to BAL NC that may be necessary.

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## BACKGROUND

The BAL NC was published in the Official Journal of the European Union on 26 March 2014. The code entered into force on 16 April 2014 providing a deadline for implementation on the 1 October 2015.

TSOs can apply for a 1-year extension until 1 October 2016. For those TSOs who apply for interim measures, the deadline for full implementation is April 2019.

In 2018, ENTSOG will be involved in supporting the implementation and monitoring of the BAL NC.

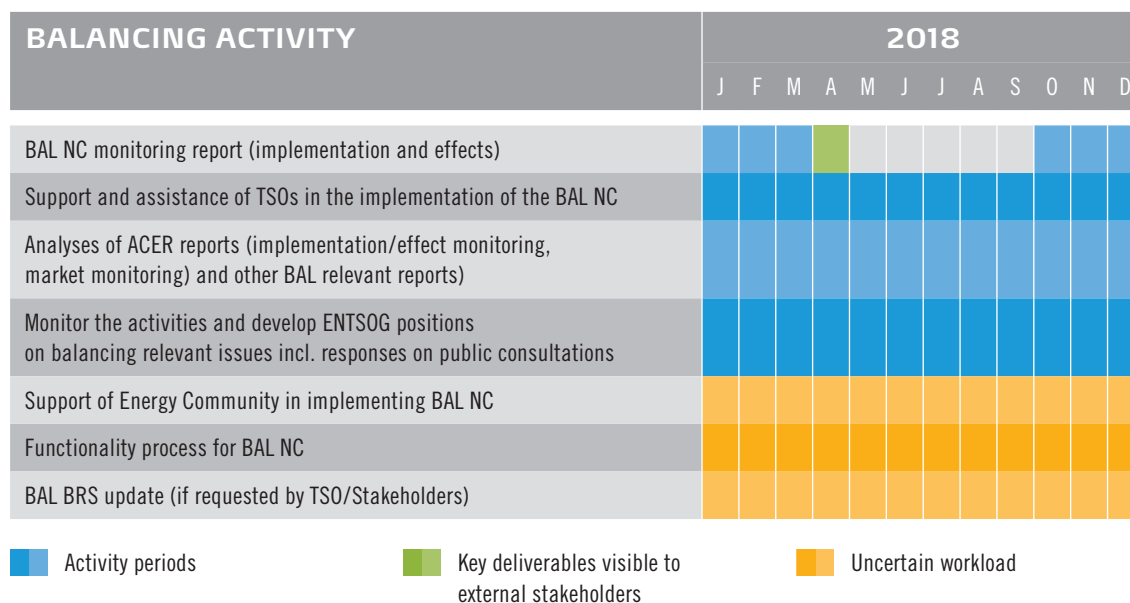
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## KEY DELIVERABLES FOR 2018

- ▲ BAL Monitoring/Reporting
- ▲ Recommendations resulting from the joint ACER and ENTSOG Functionality process involving stakeholders (CAM NC, CMP, BAL NC, TAR NC and INT NC)
- ▲ Update of BAL Business Requirements Specification (BRS) if requested by TSO/Stakeholders

## PLAN

The following table shows the expected timeline and key activities on Balancing related issues for 2018. Ongoing work in 2017 and deliverables due in 2019 which are related to these activities are not shown in the table.



Blue cells on the chart denote activity periods with green cells denoting key deliverables visible to external stakeholders. Orange cells denote uncertain workload. Other coloured cells denote non-ENTSOG activity.



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## OBJECTIVES

- ▲ To support the effective implementation of the Tariff Network Code (TAR NC) by ENTSOG members
- ▲ To monitor and analyse the implementation of the TAR NC and its effect on the harmonisation of applicable rules aimed at facilitating market integration
- ▲ To facilitate activities to promote the functionality of TAR NC in close dialogue with stakeholders
- ▲ To continue to work in close cooperation with ACER in all tariff and TAR NC related matters
- ▲ To provide expert knowledge and guidance to stakeholders related to tariffs

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## BACKGROUND

TAR NC was published in the Official Journal of the European Union on 17 March 2017 and entered into force on the 6 April 2017. The application of the TAR NC is over three dates: 06 April 2017 (chapters I, V, VII, IX, X); October 2017 (chapters VI, VIII); May 2019 (chapters II, III, IV).

In 2018, ENTSOG will be involved in supporting the implementation of the TAR NC by providing members and stakeholder's advice and guidance throughout the process as well as facilitating knowledge and good practise sharing.

Following the requirements of Article 8(8) of Regulation (EC) No 715/2009 and Article 36 of the TAR NC, ENTSOG will produce implementation monitoring and effect monitoring reports for March 2018, these will be shared with ACER and an executive summary of both reports included in ENTSOG's annual report.

ENTSOG will continue to work in close cooperation with ACER on all tariff and TAR NC related matters. This will include analysing and verifying the data that forms the basis of the Market Monitoring Report and provide feedback to ACER when they produce the report into the methodologies and parameters used to determine the allowed/target revenue of transmission system operators.

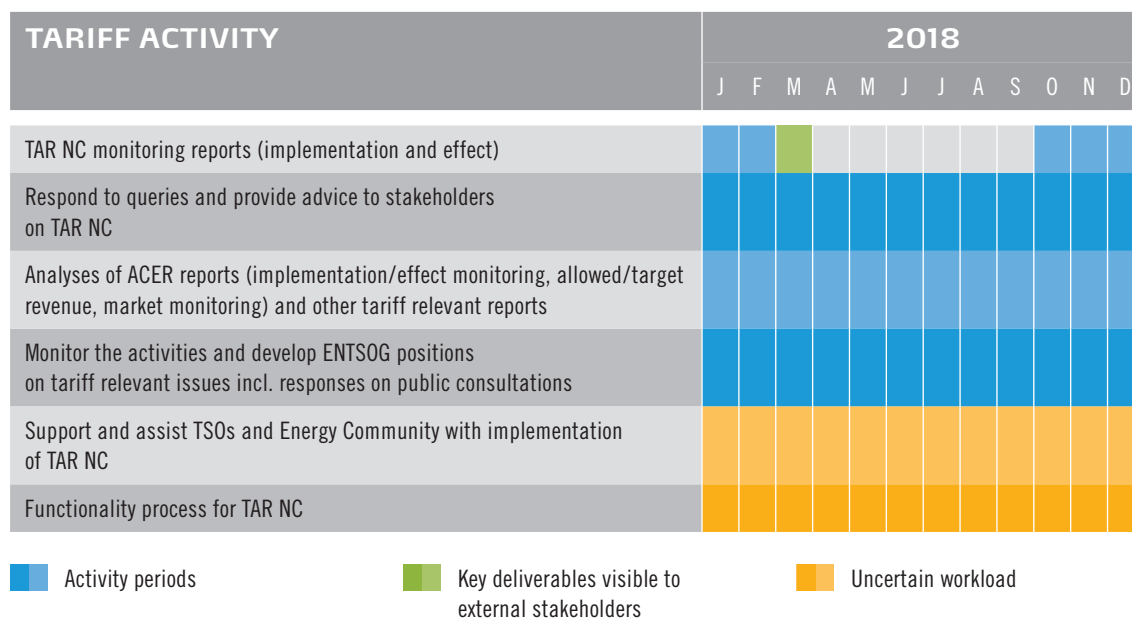
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## KEY DELIVERABLES FOR 2018

- ▲ TAR NC Monitoring/Reporting
- ▲ Recommendations resulting from the joint ACER and ENTSOG functionality process involving stakeholders (CAM NC, CMP BAL NC, TAR NC and INT NC)
- ▲ Feedback to ACER regarding their allowed/target revenue report

## PLAN

The following table shows the expected timeline and key activities on Tariff related issues for 2018. Ongoing work in 2017 and deliverables due in 2019 which are related to these activities are not shown in the table.



Blue cells on the chart denote activity periods with green cells denoting key deliverables visible to external stakeholders. Orange cells denote uncertain workload. Other coloured cells denote non-ENTSOG activity.





Image courtesy of Enagás





ENTSOG Project Plan

# 3 System Development Business Area

Investment Activity

Image courtesy of Snam Rete Gas



# Investment Activity

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## OBJECTIVES

- ▲ To meet expectations of market participants regarding the assessment of infrastructure-related market integration and its contribution to meeting the pillars of the European Energy Policy (competition, sustainability and security of supply), as well as the assessment of 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 identification through to the coming on-stream of the respective infrastructure remedies.
- ▲ To support Commission and Member States through the Gas Coordination Group in the assessment of European Security of Supply.
- ▲ To support the Regional Groups, established by the Commission, in the process of selection of Projects of Common Interest by providing the technical background and methodologies with regard to cost-benefit analysis of projects.
- ▲ To provide support to institutions and stakeholders in the understanding of gas infrastructure, and demand and supply development.
- ▲ To develop ENTSOG skills and tools to sustain the achievement of the above objectives.
- ▲ To continuously improve the quality of these activities and to provide high added value to all stakeholders.

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## KEY ENTSOG DELIVERABLES FOR 2018

- ▲ Updated CBA methodology
- ▲ Union-Wide Ten-Year Network Development Plan 2018
- ▲ Summer Supply Outlook 2018 and Summer 2017 Review
- ▲ Winter Supply Outlook 2018–2019 and Winter 2017–2018 Review
- ▲ Capacity Map 2018 and System Development Map 2017/2018

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## KEY TSO DELIVERABLES UNDER REGIONAL COOPERATION WITHIN ENTSOG

- ▲ Gas Regional Investment Plans (GRIPs)

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## BACKGROUND

The abovementioned deliverables reflect ENTSOG obligations under Regulations (EC) 715/2009 (3<sup>rd</sup> Energy Package), (EU) 994/2010 (Security of Supply), (EU) 347/2013 (Energy Infrastructure Guidelines) and EU 2015/703 (Interoperability & Data Exchange Network Code). The maps show ENTSOG commitment to transparency and to providing stakeholders with easily accessible and high added value information. In addition, the seasonal Reviews provide market participants with analysis of actual situation and help identify European trends.

All these deliverables aim at developing an integrated vision of the European energy market and in particular its infrastructure component. This integration is of particular importance in view of completing the pillars of the European Energy Policy in the perspective of achieving the European energy and climate targets and European commitments to the Paris Agreement.

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## ASSUMPTIONS

Reports published by ENTSOG since 2010 have enjoyed continuous improvement recognized by the market, in line with stakeholders' rising expectations and new regulatory requirements.

For ENTSOG, dialogue, transparent information and engagement with all concerned stakeholders is a fundamental element of developing its deliverables. ENTSOG is committed to continuous improvement of these deliverables considering stakeholders' input.

Getting an in-depth understanding of stakeholders' expectations and in some instances accessing data beyond TSOs' remit is key to develop high-quality reports. Thanks to Stakeholders feedback on ENTSOG proposals acknowledged improvements have been implemented over time, such as assessment of the infrastructure role in market integration, refined approach to scenarios, to gas imports and to projects' maturity.



Image courtesy of GAZ-SYSTEM



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## DELIVERABLES

### Deliverable 1 **Updated CBA methodology**

The CBA methodology currently in force is the one approved by Commission in February 2015. This methodology has been applied to develop TYNDP 2015 as well as TYNDP 2017. For this latest edition, ENTSOG has complemented the CBA methodology with additional elements on a voluntary basis.

Based on the experience of TYNDP 2015 and 2017, as well as 2<sup>nd</sup> and 3<sup>rd</sup> PCI processes, ENTSOG sees benefits in updating and improving the CBA methodology to be applied for the preparation of its TYNDP 2018, as foreseen in Article 11(6) of Regulation (EU) 347/2013.

As stated in the AWP 2017, ENTSOG work in 2017 towards such updated and improved methodology consists in:

- ▲ consulting stakeholders on possible improvements;
- ▲ developing the proposal for an updated methodology taking into account stakeholders' feedback
- ▲ submitting the draft updated methodology to the Agency and Commission for their opinions;

In 2018 ENTSOG intends to

- ▲ adapt, in the first half of 2018, the draft methodology upon receipt of the Agency's and Commission's opinions, and submit it to the Commission for approval
- ▲ publish the methodology on ENTSOG website within two weeks of the approval by the Commission
- ▲ engage with stakeholders to present the updated CBA methodology

TYNDP 2018 is intended to be developed based on the updated methodology. Application of the updated CBA methodology for the preparation of TYNDP 2018 will require that the Commission can approve it in accordance with TYNDP 2018 timeline.

During the year 2018 ENTSG will continue the development process for TYNDP 2018 that was initiated from early 2016. TYNDP 2018 will cover the 2018–2040 time horizon.

TYNDP 2018 is the first edition where the scenarios are developed in a joint process between both ENTSGs, in an aligned timeline and with the wide engagement of stakeholders from both sectors, as well as NRAs and Member States. The ENTSGs see this joint scenario development process as a major element of the “consistent and interlinked model” (the Model), submitted by the ENTSGs to the Commission and ACER in December 2016.

Engagement with the stakeholders on the TYNDP 2018 scenarios was initiated in 2016, with public consultation and workshops that lead to the selection of three scenarios for the 2030 and 2040 time horizon which comply with the European energy and climate targets. The TYNDP 2018 scenarios will be covered in the ENTSGs joint Scenario Development Report as consulted with stakeholders during 2017.

The joint scenario development process, as an early implementation of the Model, will ensure that the assessment of the gas and electricity infrastructure needs in the frame of the TYNDPs 2018 is performed on a transparent basis and with the same views on the energy future.

ENTSG has also engaged in 2017 in the regulatory process for updating the gas CBA Methodology, as detailed under Deliverable 1, in a timeline foreseen for allowing application of the Updated CBA Methodology when developing TYNDP 2018.

The joint scenario development process between both ENTSGs and application of Updated CBA Methodology are major elements of the TYNDP 2018 concept, together with further interaction with stakeholders in the second half of 2017, following the public consultation on the Scenario Report, in particular on the project collection process.

The report will identify the infrastructure gap, namely the priority areas lacking market integration, security of supply, competition or sustainability. The report will also assess where and to which extent the level of development of gas infrastructure could improve the infrastructure-related market integration, security of supply, competition and sustainability.

Based on the project collection process, planned from January 2018 to March 2018, TYNDP 2018 will provide a comprehensive overview of infrastructure projects, as well as the identification and analysis of infrastructure barriers met by promoters. To this purpose, the project data collection process will be further improved so as to allow for increased reliability of project data. TYNDP 2018 will include all infrastructure projects that intend to apply in the fourth selection of Projects of Common Interest. In line with its proposal for the Updated CBA Methodology, and ACER recommendations, ENTSG foresees to handle project-specific cost-benefit analysis (PS-CBA), as part of TYNDP 2018, for those projects intending to apply for the PCI label under the 4th PCI selection process. This new activity will lead to a longer TYNDP development process compared to previous editions, which extend will depend on the number of projects concerned and can therefore only be estimated at this point.

ENTSG intend to pursue in TYNDP 2018 will the publication of a TYNDP project map, as was initiated for TYNDP 2017.

In accordance with Regulation (EU) 2015/703, TYNDP 2018 will be published together with the Long-term monitoring on gas quality in transmission systems.

The TYNDP report will include two main parts: the assessment of the overall gas infrastructure and the PS-CBAs.

The timeline developed for TYNDP allows for the application – once approved – of the updated CBA methodology. TYNDP timeframe and ENTSOG resource allocation have been planned on anticipation that the timeline for the 4<sup>th</sup> PCI selection process would be comparable to the current timeline for the 3<sup>rd</sup> PCI selection process.

In this context ENTSOG sees stakeholder consultation as two-step: consultation on the TYNDP infrastructure assessment performed by ENTSOG as part of the TYNDP process in autumn 2018, and consultation on Projects of Common Interest performed by the Commission at a later stage as part of the regulatory PCI process.

The complete TYNDP 2018 report, including the PS-CBAs, will be formally submitted to the Agency early 2019, together with the results of the public consultation.

The final TYNDP will subsequently be published in spring 2019. This will enable its efficient use as basis for the selection of the fourth list of Projects of Common Interest (PCI), both to support the identification by Regional Groups of the investment needs, and to serve as basis for the project-specific cost-benefit analysis of PCI candidates.

Changes by the Commission in the PCI selection process, or late approval of the CBA methodology update, may impact on the TYNDP timeline and ENTSOG resource allocation.





### **Deliverable 3**

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#### **Elaboration of Summer Supply Outlook 2018 and Summer 2017 Review**

ENTSOG aims at publishing its Summer Supply Outlook 2018 in April, in order for stakeholders to be informed very early in the injection season. To establish this report ENTSOG will build on the experience gathered since 2010 taking due account of ACER opinions and stakeholder feedback. The report will benefit from the latest development of IT/R&D activities in the fields of modelling, supply and demand approaches.

Summer Supply Outlook will assess the ability of the European gas infrastructures to provide flexibility while enabling shippers to fill storage in preparation of the winter. This report assesses the level of service provided by infrastructures considering the latest trends in supply and demand and does not intend to forecast market behaviour. As for all Supply Outlooks since 2013, Commission and Member States, through the Gas Coordination Group, will be able to ask ENTSOG for specific situations they would want to be assessed.

Along with its Summer Supply Outlook 2018 ENTSOG will also deliver on a voluntary basis the Summer 2017 Review: a description of the behaviour of the gas market during the summer months of 2017 on the basis of the observed daily gas flows and prices. It will provide the opportunity to investigate the short-term demand and supply trends and especially the dynamic of the gas demand for power generation. The Review will cover any relevant event taking place during the period.

This analysis will then be factored in the R&D plan for further improvement of ENTSOG approach for future deliverables.

### **Deliverable 4**

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#### **Elaboration of Winter Supply Outlook 2018–2019 and Winter 2017–2018 Review**

ENTSOG aims at publishing its Winter Supply Outlook 2018–2019 in October 2018, in order for stakeholders to be informed very early in the withdrawal season. To establish this report ENTSOG will build on the experience gathered since 2010 taking due account of ACER opinions and stakeholder feedback. The report will benefit from the latest development of IT/R&D activities in the fields of modelling, supply and demand approaches.

Winter Supply Outlook will assess both the possible evolution of UGS inventory along different winter cases as well as the resilience of the European gas infrastructures under peak conditions. This report assesses the level of service provided by infrastructures considering the latest trends in supply and demand and does not intend to forecast market behaviour. As for all Supply Outlooks since 2013, Commission and Member States, through the Gas Coordination Group, will be able to ask ENTSOG for specific situations they would want to be assessed.

Along with the Winter Supply Outlook 2018–2019 ENTSOG will also deliver on a voluntary basis the Winter 2017–2018 Review, a description of the behaviour of the gas market during the winter months of 2017–2018 on the basis of the observed daily gas flows and prices. It will provide the opportunity to investigate the short-term demand and supply trends and especially the dynamic of the gas demand for power generation. The Review will cover any relevant event taking place during the period.

This analysis will then be factored in the R&D plan for further improvement of ENTSOG approach for future deliverables.

## Deliverable 5

### Capacity Map 2018 and System Development Map 2017/2018

Since its creation ENTSOG has developed on a yearly and voluntary basis, two different maps: the Capacity Map, and together with GIE the System Development Map. These maps are welcomed by institutions and stakeholders as a highly useful overview.

In 2018 as for the previous years, ENTSOG will establish those maps that can be either consulted or purchased from ENTSOG website.

### Preparation of Union-wide Ten-Year Network Development Plan 2020

Developing the Union-wide Ten-Year Network Development Plan is a continuous process. ENTSOG will be releasing the sixth TYNDP edition in 2018, but work will also start in preparation for the TYNDP 2020.

ENTSOs joint scenario development process, as part of the “consistent and inter-linked model”, will build on continued cooperation between ENTSOG and ENTSO-E, allowing for the evolution of policy and technology to be considered, and for the experience gained from TYNDP 2018 to be factored in.

Further evolutions may take place with regards to the “consistent and interlinked model” or more generally in terms of the gas and electricity sectors’ interlinkages that may be identified as relevant. Depending on these potential evolutions, the ENTSOs may consider if and how to consider in their TYNDP processes.



Image courtesy of ONTRAS

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## SUPPORTING ACTIVITIES

### **Supporting activity 1: Gas Coordination Group (GCG)**

Over 2018, ENTSOG will follow up on any request given to it by the Gas Coordination Group (GCG), including those related to the first Union-wide simulation of supply and infrastructure scenarios, an exercise which required proactive engagement by ENTSOG and close cooperation with the GCG throughout 2017, and is due to be finalised by 1<sup>st</sup> November 2017, in line with the revised Regulation(EU) 994/2010.

ENTSOG will also keep the European Commission and Member States updated about all other ENTSOG activities related to security of gas supplies, in particular with regards to seasonal Outlooks.

### **Supporting activity 2: Support to Regional Groups on the PCI selection process**

ENTSOG will take part in the Cooperation platform between Commission, ACER and ENTSOs if maintained, and will participate in and support the work of the Regional Groups established by the Commission in the tasks of running the 4<sup>th</sup> PCI selection process and monitoring PCIs. Early definition by the Commission of the timeline and work plan for the 4<sup>th</sup> PCI process would allow for ENTSOG to efficiently plan for the necessary resources and activities.

ENTSOG will also support promoters of projects applying for the PCI label, as for the 3<sup>rd</sup> PCI selection process, including through handling Project-Specific cost-benefit analysis as part of TYNDP 2018, in line with its proposal for the Updated CBA Methodology, and ACER recommendations.

### **Supporting activity 3: GRIPs – TSOs regional cooperation within ENTSOG**

The 4<sup>th</sup> edition of Gas Regional Investment Plans (GRIPs) will be developed in a joint process with the development of TYNDP 2018. This joint process will ensure the use of a common dataset for GRIPs and TYNDP and complementarity between the reports.

ENTSOG will support TSOs in the development of this 4<sup>th</sup> edition.

### **Supporting activity 4: Follow-up on Commission TEN-E Regulation evaluation process**

The publication of the TEN-E evaluation report by the Commission is expected by end 2017. Depending on the outcomes of the TEN-E evaluation, ENTSOG stands ready to support the Commission in the next steps, in compliance with the other System development activities.



## PLAN

The following table shows the expected timeline and key activities on Investment related issues for 2018. Ongoing work in 2017 and deliverables due in 2019 which are related to these activities are not shown in the table.

SYSTEM DEVELOPMENT ACTIVITY	2018											
	J	F	M	A	M	J	J	A	S	O	N	D
<b>TYNDP 2018</b>												
Project Data collection												
Draft report edition												
Public consultation												
PS-CBAs												
Formal submission to ACER												
Final report edition												
<b>REGIONAL COOPERATION – GRIPs</b>												
Support for TSOs												
Report release by TSOs												
<b>SUPPORT TO REGIONAL GROUPS</b>												
Support to Regional Groups												
<b>SUMMER SUPPLY OUTLOOK 2018 &amp; REVIEW</b>												
Summer Supply Outlook 2018												
Summer Review 2017												
<b>WINTER SUPPLY OUTLOOK 2018/19 &amp; REVIEW</b>												
Winter Supply Outlook 2018/19												
Winter Review 2017/18												
<b>UPDATED CBA METHODOLOGY</b>												
EC opinion on draft methodology												
Adaptation process												
Publication of the approved methodology												
<b>TYNDP 2020</b>												
Scenario development and stakeholder process												

Activity periods

Key deliverables visible to external stakeholders

Uncertain workload

Blue cells on the chart denote activity periods with green cells denoting key deliverables visible to external stakeholders. Other coloured cells denote non-ENTSOG activity.



# 4 System Operation Business Area

Transparency Activity

Interoperability Activity



Image courtesy of Fluxys

# Transparency Activity

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## OBJECTIVE

To enhance the transparency of gas TSOs' activities in the European Union.

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## KEY DELIVERABLES FOR 2018

- ▲ Further enhance ENTSOG Transparency Platform with functionalities improving the usability and user-friendliness of the published data.
- ▲ Analyse issues and suggestions raised by stakeholders, i.e. via public workshops, satisfaction surveys or the TP Help Section.
- ▲ Support the TSOs in improving data completeness and consistency.
- ▲ Support the TSOs in any improvements or updates made to REMIT requirements.
- ▲ Follow and implement the transparency requirements coming from the Network Codes.
- ▲ Support TSOs from Energy Community Contracting Parties concerning their transparency publications on ENTSOG TP

---

## BACKGROUND

In line with the AWP 2017, ENTSOG continues to update and improve the ENTSOG Transparency Platform to the benefit of all users and stakeholders. The Transparency Platform provides technical and commercial data on the TSOs' transmission relevant points, showing all of them on an interactive map. The information is available free of charge, provided by the TSOs.

ENTSOG continues to work closely with the TSOs to follow up on the implementation of regulation provisions, including the transparency requirements coming from the Network Codes, amendments to Network Codes and REMIT.



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## ACHIEVEMENTS AND ISSUES ARISING TO DATE

ENTSOG and its members have worked together continuously to improve the functionalities, the user-friendliness and the data quality of ENTSOG Transparency Platform. Several new functionalities have been deployed after the launch of the platform in its present version, supporting this goal. These also include new functionalities related to transparency requirements from new and amended Network Codes. As the list is quite extensive, we invite you to see the full list in the presentation from the last [Transparency Workshop 8 December 2016](#).

ENTSOG has continued to facilitate public and internal workshops, focusing on the implementation of the transparency guidelines coming from Regulation No (EC) 715/2009, the before-mentioned continuous improvement of the Transparency Platform functionalities and the implementation of REMIT requirements.

The usage of the Transparency Platform continues to increase. Comparing with the usage in the same period in 2016, we notice the following positive trends for Jan–May 2017:<sup>1)</sup>

- ▲ 45 % increase in visitors
- ▲ 35 % decrease in actions of visitors
- ▲ 31 % decrease in number of page views AND a 10 % decrease in the visit duration
- ▲ 37 % increase in downloads
- ▲ 99 % increase in unique downloads



**Figure 1:** Visits since 1 January 2016 (daily)

It is very satisfactory to see these positive trends for the usage of the ENTSOG TP. We consider the decrease in user duration time, coupled with the decrease in actions and page views, as a sign of increased user friendliness. To ensure the stakeholder input, ENTSOG will continue to run user satisfaction queries.

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1) Statistics for 01.01.2016–01.06.2016 and 01.01.2017–01.06.2017, pulled from ENTSOG internal monitoring tool:

- Visits: 236,397 versus 342,417
- Actions: 169 versus 109
- Average visit duration: 34 m 32 s versus 30 m 57 s
- Downloads: 21,047,897 versus 28,775,308
- Unique downloads: 7,927,311 versus 15,775,119

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## ACTIVITIES

### Activity 1:

Analyse stakeholder feedback and implement new functionalities on the Transparency Platform that will improve the usability and user-friendliness of the published data.

### Activity 2:

Support the TSOs in improving data consistency in line with legal obligations.

### Activity 3:

Facilitate required data collection processes when required by the legislation, e.g. the information for ACER's 2017 Congestion Monitoring Report.

### Activity 4:

Follow-up on reporting provisions as well as data collection processes for TSOs and ENTSOG under REMIT obligations. ENTSOG will support TSOs during the implementation of further reporting obligations.

### Activity 5:

Analyse legal transparency requirements coming from EU legislation such as Regulation (EC) No. 715/2009, Regulation (EU) No. 1227/2011, Regulation (EU) No. 1348/2014, Regulation (EU) 2015/703, Regulation (EU) 2017/460, Regulation (EU) 2017/459 etc.

### Activity 6:

Cooperate with ENTSOG business areas to fulfil transparency requirements coming from relevant network codes and liaise with relevant ENTSOG WG to identify synergies in fulfilling these obligations.

### Activity 7:

Cooperate with other ENTSOG business areas to support those areas, if needs for new platform features are identified and agreed upon. This includes the continued support to develop an internal operational map following the concept of the ReCo System for Gas (building on existing TP data and functionalities).

### Activity 8:

Run the 4<sup>th</sup> TP stakeholder satisfaction survey and organise the annual workshop on transparency to receive feedback from stakeholders.

## PLAN

The following table shows the expected timeline and key activities on Transparency related issues for 2018. Ongoing work in 2017 and deliverables due in 2019 which are related to these activities are not shown in the table.

TRANSPARENCY ACTIVITY	2018											
	J	F	M	A	M	J	J	A	S	O	N	D
1) Continuous platform improvements												
2) Data consistency support to TSOs												
3) Facilitate required data collection processes												
4) Follow-up on REMIT requirements												
5) Analyse legal transparency requirements coming from EU legislation												
6) Cooperate with ENTSG business areas to fulfil transparency requirements coming from relevant NCs												
7) Facilitate and support other areas with projects concerning TP, incl. operational map												
8) Stakeholder satisfaction survey on the TP												
9) Public workshop on Transparency												

Activity periods Key deliverables visible to external stakeholders

Blue cells on the chart denote activity periods, green cells indicate key deliverables visible to external stakeholders. Other coloured cells denote no planned activity.





# Interoperability Activity

## OBJECTIVE

The main objectives of ENTSOG Interoperability Working Group (INT WG) for 2018 are:

- ▲ To monitor the implementation and functioning of the Network Code on Interoperability and Data Exchange rules (INT NC)
- ▲ The follow-up of on-going processes related to gas quality standardisation
- ▲ To review and update existing common network operation tools (CNOTs) to support the implementation of the Data Exchange rules developed in the Network Codes, if required
- ▲ To support the transparency WG (if requested) in the development and maintenance of data exchange requirements for Market Integrity and Transparency.
- ▲ To update recommendations relating to the coordination of technical cooperation between Member States, Energy Community and third-country transmission system operators (Art 8(3)c) Regulation (EC) No. 715/2009)
- ▲ Within the framework of the revised SoS regulation, to facilitate the functioning of the Regional Coordination System for Gas (ReCo System for Gas) as CNOT for emergency conditions (Art 8(3)c) Regulation (EC) No. 715/2009)
- ▲ To support the Gas Coordination Group and relevant stakeholders in the implementation of the revised SoS regulation
- ▲ To operate the Local Issuing Office for Energy Identification Coding scheme

Furthermore, the Interoperability Working Group is assisting other ENTSOG Working Groups, in order to ensure a consistent approach towards interoperability and data exchange when implementing and monitoring the functionality of network codes covering different but interlinked areas.

## KEY DELIVERABLES FOR 2018

The following deliverables will be provided during 2018:

- ▲ Report on the implementation monitoring of INT NC (see activity 1)
- ▲ Support the System Development Area to include the second Long-Term Gas Quality Outlook in TYNDP 2018 (see activity 2)
- ▲ Workshop related to gas quality and interoperability (see activity 2)
- ▲ Workshops for supporting the implementation of INT NC rules and expanding regional cooperation with Energy Community and third country TSOs (see activity 3)
- ▲ Establishment of the existing ReCo System for Gas as a CNOT for emergency conditions, including a common incidents classification scale (see activity 3).
- ▲ Any necessary updates of Business Requirement Specifications, Implementation Guidelines and technical communication profiles for data exchange related to the implementation of capacity allocation mechanisms network code, congestion management procedures guidelines, the interoperability network code and the balancing network code (see activity 4)
- ▲ Workshop related to the implementation of Common Data Exchange Solutions (see activity 4)
- ▲ Management of EIC Codes by weekly updates to CIO and ENTSOG website and by delivering final responses to requests within max 10 days (see activity 5)

---

## BACKGROUND

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 Union, thus hampering market integration. The network code on interoperability and data exchange rules enables the necessary harmonisation in those areas, therefore leading to effective market integration. For that purpose and for facilitating commercial and operational cooperation between adjacent transmission system operators, ENTSOG provides assistance for the harmonized implementation of the INT NC and develops CNOT for the technical implementation of Network Codes and Guidelines.

---

## ACHIEVEMENTS AND ISSUES ARISING TO DATE

ENTSOG was invited by the European Commission to develop a Network Code on Interoperability and Data Exchange rules (INT NC) on 11 September 2012. Following an open process, ENTSOG developed and proposed a draft INT NC. This draft was then revised taking into account ACER's reasoned opinion and was sent to European Commission and ACER on 18 Dec 2013. The revised draft was also recommended by ACER for adoption and it passed successfully through the comitology process by November 2014. The Network Code was adopted on 30 April 2015, entered into force at 21 May 2015 and applies from 1 May 2016.

The CNOTs for the implementation of CAM NC/CMP and BAL NC were first published in 2015 comprising Business Requirement Specifications and Implementation Guidelines for the common Data Exchange solutions. In 2016, the CNOTs were updated with the selection of the common data exchange solutions.

In line with obligations arising from Art. 5 of INT NC, ENTSOG developed and published in 2015 an interconnection agreement template covering the default terms and conditions together with a guidance document on interconnection agreements.

In September 2016, ENTSOG published the first implementation monitoring report of the Interoperability network code.

In December 2016 ENTSOG finalised its impact analysis of a reference to the EN16726:2015 (the gas quality standard) in the network code on Interoperability and Data Exchange. ENTSOG concluded, in line with Madrid Forum conclusions, not to recommend an amendment of the interoperability network code.

Fostering the regional cooperation, the Early Warning System was established in 2014 and 2015 facilitating a coordinated reaction to potential supply crises on short notice. In 2016, it was further developed into the current Regional Coordination System for Gas (ReCo System for Gas) in the context of the revised SoS regulation, for which ENTSOG also contributed with the concept of supply corridors.

In addition, following the request of the EC, an on-going monitoring report for gas transit flows in Ukraine was developed and established in 2014.

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## ACTIVITIES

### **Activity 1: Monitoring of the implementation and functioning of the Network Code on Interoperability and Data Exchange Rules**

- ▲ Monitor and analyse how transmission system operators have implemented the INT NC
- ▲ Analyse any proposals arising from the Joint Functionality Process including validation, categorisation and prioritisation of the issues and develop proposals for improvement or amendment of the network codes or guidelines together with other ENTSOG business areas as well as with ACER
- ▲ Support the TSOs of Member States, Energy Community and third countries in the implementation of the NC

### **Activity 2: Gas quality**

- ▲ Collaborate with System Development Area in the preparation of TYNDP 2018 in order to include the second Long-Term Gas Quality Outlook
- ▲ Cooperation with CEN in the standardisation work for harmonisation of Wobbe Index (assessment phase of Wobbe Index implementation scenarios)
- ▲ Cooperation with CEN in the pre-standardisation work on the injection of hydrogen and other renewable gases into natural gas
- ▲ Cooperation with stakeholders along the gas value chain in the field of gas quality
- ▲ Organisation of one public stakeholder workshop on gas quality and interoperability issues.

### **Activity 3: Facilitate regional cooperation for security of supply and operational issues**

- ▲ Support of the EC and the Gas Coordination Group in the implementation of the revised SoS regulation
- ▲ Support the TSOs and MS in the risk assessment for the defined groups based on the results of the Union-wide simulation.
- ▲ Support the TSOs and competent authorities in the establishment of the preventive action and emergency plans.
- ▲ Support the TSOs and competent authorities to agree on the technical arrangements for the application of the solidarity principles
- ▲ Establishment of the existing ReCo System for Gas as a CNOT for emergency conditions, including a common incidents classification scale.
- ▲ Facilitation of the ReCo System for Gas and the related ReCo Teams.
- ▲ Investigate the need to implement a ReCo Team South East
- ▲ Finalisation of and training for the use of the ReCo operational map
- ▲ Investigate potential interactions with other critical infrastructure operators and other stakeholders in crisis situations.
- ▲ Support Energy Community contracting parties and third countries transmission system operators concerning security of supply
- ▲ Update of recommendations relating to the coordination of technical cooperation between Member States, Energy Community and third-country transmission system operators
- ▲ Further support the EC in their activities concerning gas flows monitoring in Ukraine as well as in the EU-Russian Work Stream 3 energy dialog



#### **Activity 4: Development, support and maintenance of common network operation tools (CNOTS) for data exchange**

- ▲ Monitor the implementation and functionality of published CNOTS for CAM/ CMP and Nominations and matching procedures, including the related Business Requirement Specifications, Implementation Guidelines and the technical communication profiles for the selected common solutions for Data Exchange
- ▲ Organisation of a public stakeholder workshop related to the implementation of Common Data Exchange Solutions
- ▲ Collaboration and information sharing with EC and other organisations in relation to Data Formats & Procedures (Common Data Exchange Solutions for Gas TSOs)
- ▲ Cooperate with EASEE-gas in the development and release management of the Implementation Guidelines and other developments in the field of data exchange related to network codes

#### **Activity 5: Operate the Local Issuing Office for Energy Identification Coding scheme**

- ▲ Management of EIC Codes by weekly updates to the Central Issuing Office (CIO/ENTSOE) and ENTSOG website and by delivering final responses to requests within max 10 days
- ▲ Management of the EIC-codes already issued or that will be issued by LIO 21 and the responsibility for the maintenance and updating of relevant pages on ENTSOG website and contacts with the CIO.
- ▲ Cooperation with ENTSOE to further streamline and standardise the implementation of the scheme in the gas sector.



Image courtesy of National Grid

## PLAN

The following table shows the expected timeline and key activities on Interoperability related issues for 2018. Ongoing work in 2017 and deliverables due in 2019 which are related to these activities are not shown in the table.

DELIVERABLE	2018											
	J	F	M	A	M	J	J	A	S	O	N	D
INT NC implementation and functioning Monitoring												
Long-Term Gas Quality Outlook												
Gas Quality Workshop												
Establishment of the existing ReCo System for Gas as a CNOT for emergency conditions.												
Workshop on INT NC implementation for Energy Community and third countries												
Update of recommendations regarding technical cooperation EU-EC-third countries												
Management (and review) of CNOTs												
Data Exchange workshop												
Operate the LIO office (continuous activity)												

Activity periods      Key deliverables visible to external stakeholders

Note: Dates for deliverables without an explicit indicated delivery date will be agreed in due time by the INT WG together with the concerned stakeholders.

Blue cells on the chart denote activity periods with green cells denoting key deliverables visible to external stakeholders. Orange cells denote uncertain workload. Other coloured cells denote non-ENTSOG activity.



# 5

## ENTSOG Project Plan IT and Research & Development Activity

IT and Research & Development Activity



# IT and Research & Development Activity

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## **IT/R&D 1: FURTHER ANALYSIS OF GAS DEMAND**

ENTSO-G aims at developing a holistic approach to energy demand, drawing the link between high-level political orientations and gas demand figures that form the basis of the assessment of European gas infrastructures.

ENTSO-G continues to drive for increased granularity of the gas demand data, with an increasing focus on the development of gas fuelled technology across multiple sectors, using a combination of TSO expertise and stakeholder input, as well as publically available studies and scenarios.

During the development of the TYNDP 2018, in view of the “consistent and inter-linked model”, ENTSO-E and ENTSO-G worked in close cooperation on the scenario development process. This ensures alignment on TYNDP scenarios, both with regard to the power sector and sectors where both energies may be increasingly competing in the future.

ENTSO-G will continue working on the evaluation of the impact of demand-side measures in the assessment of European gas infrastructures.

All the insight gained will be applied to future TYNDP editions as well as the Seasonal Outlooks and Reviews.

---

## **IT/R&D 2: FURTHER ANALYSIS OF SUPPLY FLEXIBILITY**

The flexibility required by intermittent power generation is mainly provided daily or intra-daily by fast-reacting flexibility sources, while the longer-term fluctuations are covered by a wider range of supply sources.

Therefore, a better understanding of the daily modulation performed by the different sources in relation with their specific features – particularly the storage component – during the last years will facilitate the evaluation of the ability of the gas infrastructures to adapt to supply patterns following the changing demand requirements in the future.

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## **IT/R&D 3: FURTHER IMPROVEMENT OF ENTSO-G MODELLING TOOL**

ENTSO-G modelling tool is used to develop the Union-wide TYNDP, the Supply Outlooks and the Union wide simulations under the regulation 994/2010 currently under revision.

ENTSO-G experience in the modelling of the gas market and network has strongly and continuously developed since 2013 with the enhancement required for the development of CBA methodology under Regulation (EU) 347/2013. It is interfaced with ENTSO-G Professional Data Warehouse System (PDWS) and Transparency Platform enabling a robust and agile definition of cases to be modelled.

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## **IT/R&D 4: LONG-TERM MONITORING ON GAS QUALITY IN TRANSMISSION SYSTEMS**

In accordance with Regulation (EU) No. 2015/703, ENTSOG will have published the second Long-Term Gas Quality Monitoring Outlook in transmission systems together with TYNDP 2018.

In the light of the first gas quality outlook experience in TYNDP 2017, ENTSOG will consider further improvements for the gas quality outlook 2018, such as the inclusion of biomethane quality and a revision of LNG ranges in view of new supply origins arriving in Europe.

In the field of gas quality, ENTSOG keeps a close cooperation with CEN in the framework of the revision of EN16726 (H-gas quality standard) by, for example, providing an analysis of gas quality ranges and stability at exit points. In 2018 ENTSOG will continue monitoring developments in biomethane and hydrogen also in liaison with relevant Marcogaz working groups.

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## **IT/R&D 5: ONGOING ENHANCEMENT TO THE PDWS AND TP**

ENTSOG owns and maintains a data repository and reporting solution (Professional Data Warehouse System, or PDWS). This solution supports the activities of the business areas. The system will be enhanced further to fulfil the needs of its users, which will include development of additional reports and automated extracts. Following public consultation, ACER will likely update the REMIT schemas requiring ENTSOG reporting modifications.

The Transparency Platform (TP) is part of the PDWS and publishes data provided by TSOs. Further enhancement requests originating from the TP users will be assessed and developed. For example, further enhancements to the TP may be required following the publication of Tariff data following the TAR NC; extend the TP as a platform to facilitate the ReCo System as foreseen in the revised SoS regulation.

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## IT/R&D 6: DATA COLLECTION PORTAL IMPROVEMENT

ENTSOE inaugurated an online data collection portal during the TYNDP 2015 preparation process. The portal covers infrastructure projects but also demand data provided by TSOs. The portal is upgraded on a continuous basis in order to improve its user-friendliness and to cope with the evolution of the TYNDP's concept.

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## IT/R&D 7: STANDARDISATION AND AUTOMATION OF URGENT MARKET MESSAGES

Urgent Market Messages (UMM) are foreseen under REMIT. ACER has undertaken to standardise the format of such messages across all platforms currently publishing them. The TP is one of such platforms. Building on the activities delivered in 2017, ENTSOG will complete the standardisation and automation of UMMs.

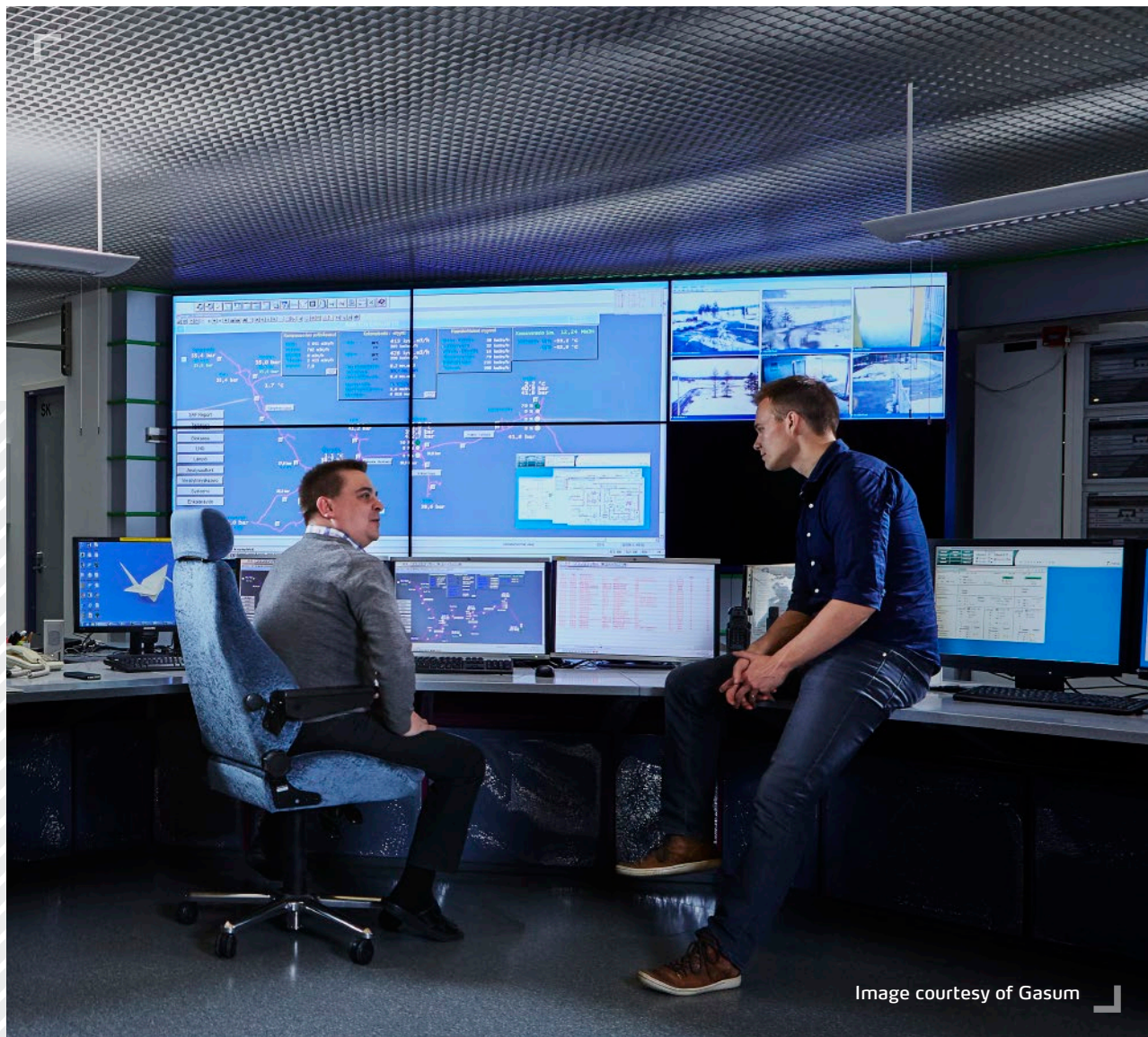
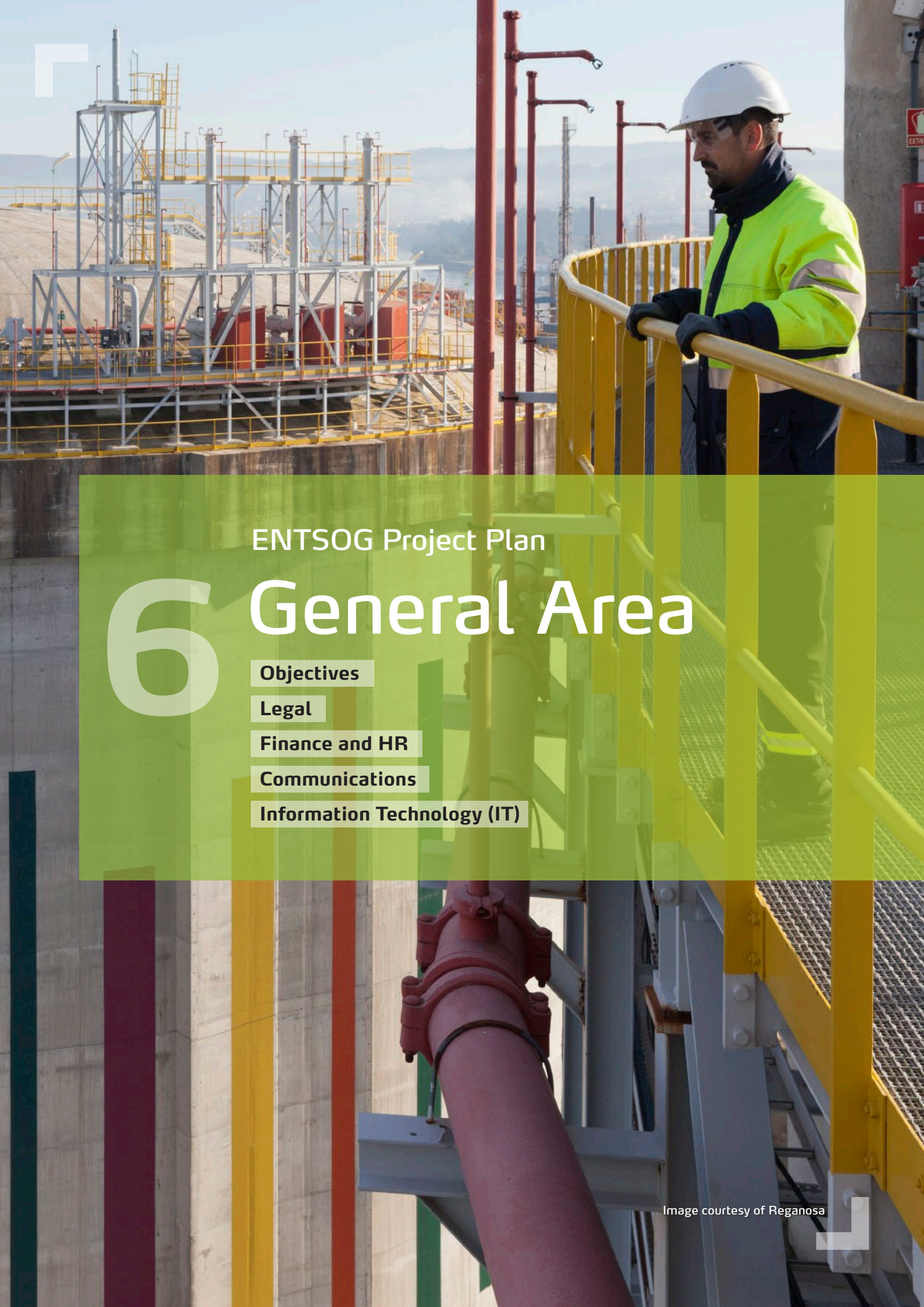


Image courtesy of Gasum





ENTSOG Project Plan

# 6 General Area

Objectives

Legal

Finance and HR

Communications

Information Technology (IT)

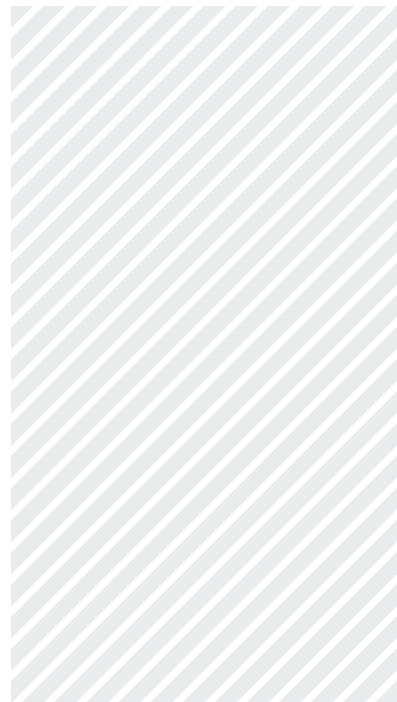
Image courtesy of Reganosa

# Objectives

With the support of its members and the guidance of its steering bodies the General Area Team coordinates and supports the work of ENTSOG. It prepares, arranges and coordinates the various General Assembly and Board Meetings and keeps 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, General Area Team supports ENTSOG planning, management and execution.

The General Area Team aims to establish and maintain the most efficient structure to support all Business Areas (i. e. Market, System Development and System Operation) and the related working groups. This includes the planning and building up of financial and human resources as well as the communication flow within the association and to its stakeholders.

ENTSOG has initiated internally to evaluate the risks that present challenges to meet its objectives. The systematic process of risk assessment and plans for proper mitigation measures will be supervised by ENTSOG's steering bodies.





The ENTSOG Legal Team ensures the day to day activities of the association from the legal perspective as well as supporting activities undertaken by the different Business Areas.

In 2018 the support will continue with respect to the implementation of the existing network codes and in some cases effect monitoring. The Legal Team will in particular support the application of Article 20 of the CAM NC, according to which ENTSOG must draft a template of harmonized main terms and conditions for the allocation of bundled capacities (more detail in the Market and System Operation sections of this report). The Legal Team will also support the System Development team by providing legal assistance to include but not limited to (i) the further development and implementation of the future updated CBA methodology, including the consistent and interlinked gas and electricity model, and (ii) the continuing development of the TYNDPs (more detail in System Development section of this report).

To address the legal issues arising out of 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 Team also provides legal assistance and advice to the management, the Board and the General Assembly in terms of governance. In 2018, the Legal Team will in particular be strongly involved in all the arrangements related to the renewal of the Board, as the current Board mandate will be concluding in December 2018. The formalities for the election of the new Board members as well as the designation of General Manager will be addressed. The Legal Team will also support ENTSOG further IT development, notably in terms of cyber security and personal data protection, from a legal perspective.



Picture courtesy of Snam Rete Gas



## FINANCE

ENTSOG is an international non-profit association (AISBL) established according to Belgian law and is now comprised of 45 Member TSOs. The highest decisive body of ENTSOG is the General Assembly which meets four times a year. ENTSOG 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 ENTSOG 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

## HUMAN RESOURCES

ENTSOG is committed to delivering the documents foreseen by the Three-Year Plan for gas and to actively promoting stakeholders to pursue the targets stipulated by the Third Energy Package. This requires a well-prepared recruitment pipeline so that ENTSOG will have the relevant resources and competences to perform the requested activities.

By the end of 2017, the ENTSOG Team in Brussels consisted of 38 persons and a replacement plan commenced the previous year to replace seconded persons whose contracts had expired. It became necessary to hold several ad hoc consultations and draft positions on a number of issues. Most of this work was done in the Market Area, but in the years to come more work load can be expected in the technical areas, System Development and System Operation.

ENTSOG is comprised of seconded staff from its members – typically seconded for 3–5 years – and therefore the organisation is under dynamic change and ready to offer new opportunities. The ENTSOG staff consists currently 16 different nationalities and representing 17 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 European Commission, ACER and other European authorities.

ENTSOG STAFF	31 DEC 2017	31 DEC 2018
General Manager	1	1
Business Area Managers	3	3
Advisers	30	30
Senior Assistants	3	3
Assistant	1	1
<b>Total</b>	<b>38</b>	<b>38</b>

# Communications

It is the aim of ENTSOG to always communicate its activities in a transparent manner. The Communications Team provides support to managerial activities as well as promoting the activities of ENTSOG to its members and the external environment.

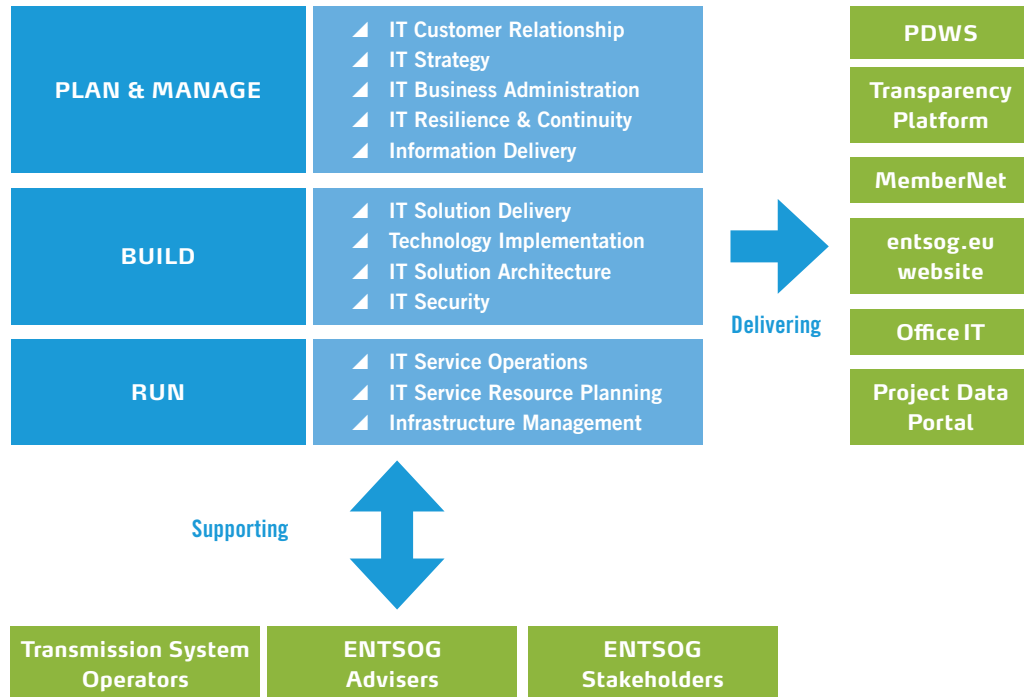
One of the tasks will be to monitor the activities and public opinions of relevant stakeholders. This can be achieved by contributing to consultations, participating in conferences and fora as discussion partner or speaker but also by maintaining a close dialogue with media representatives. One of ENTSOG's primary aims is to involve the relevant market participants/stakeholders in its work. This requires well-prepared stakeholder management and well-structured and efficient workshops, as well as an accurate updated web site to communicate the work undertaken effectively and to enhance ENTSOG's visibility and recognise its efforts. Consistent branding is managed by a small communications team, who is responsible for the coordination for all publications (e.g., the Annual Report and Annual Work Programme) and is in dialogue with members within the organisation, the European Commission, ACER as well as with key external stakeholders.

The team contributes to the strategic processes, aimed at defining the ENTSOG profile and taking care of the consistent application of those strategic orientation lines in the practices of the organisation. The team has been tasked with further development of the ENTSOG network, with raising awareness of policy processes and with organising the internal knowledge sharing on upcoming regulatory developments and with strengthening of internal communication. The Communication Team also watches the consistency of ENTSOG communications towards stakeholders, media and broader public.



# 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, EC). Figure 2 outlines the key delivery and support activities which are the responsibility of the IT team.



**Figure 2:** Key delivery and support activities 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)
- ▲ Project Data Portal
- ▲ Transparency Platform (TP)
- ▲ Content Management Solutions
- ▲ Website
- ▲ Office IT – Network, Laptops, Mobile phones, etc.

In 2018, the IT team will complete its Cyber-Security programme and deliver the IT requirements for the General Data Protection Regulation (GDPR) due to implemented in May 2018. The IT team will continue to provide IT support and solutions to Business Area deliverables. Working with the Communications team, IT will assist with potential updates of the ENTSOG website and the membernet.

ENTSOG will also conduct a review of its IT systems in 2018. The review will consider the ongoing and future IT needs of ENTSOG and its stakeholders. It will also consider the replacement/upgrade of ENTSOG's IT assets in the coming years to deliver secure, integrated and cost-effective IT solutions for ENTSOG.



# Annex: Overview of ENTSOG's Regulatory framework for its tasks

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

**Regulation (EC) No. 715/2009 of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No. 1775/2005 (so-called *Gas Regulation*)**

- ▲ Definition of the tasks of ENTSOG (Art. 8)
  - elaboration of network codes (NCs);
  - adoption of:
    - I. common network operation tools (CNOTs);
    - II. a non-binding Community-wide ten-year network development plan;
    - III. recommendations relating to the coordination of technical cooperation between Community and third-country TSOs;
    - IV. an annual work programme;
    - V. an annual report;
    - VI. annual summer and winter supply outlooks.
- ▲ obligation of monitoring and analysing the implementation of NCs and the Guidelines adopted by the Commission and their effect on the harmonisation of applicable rules aimed at facilitating market integration.
- ▲ ENTSOG shall make available all information required by ACER to fulfil its tasks.
- ▲ All TSOs shall cooperate at Community level through ENTSOG in order to promote the completion and functioning of the internal market in natural gas and cross-border trade and to ensure the optimal management, coordinated operation and sound technical evolution of the natural gas transmission network (Art. 4);
- ▲ TSOs shall establish regional cooperation within the ENTSOG to contribute to the accomplishment of some of its tasks (Art. 12);

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

- ▲ market participants, or a person or authority on their behalf (as ENTSOG), shall provide ACER with a record of wholesale energy market transactions, including orders to trade (Art. 8);
- ▲ cooperation at Union level foreseen (Art. 16);

**Commission Implementing Regulation (EU) No. 1348/2014 of 17 December 2014 on data reporting implementing Article 8(2) and Article 8(6) of Regulation (EU) No. 1227/2011 (so-called REMIT Implementing Act)**

- ▲ For reducing the burden of reporting on market participants and to make best use of existing data sources, reporting should involve where possible ENTSOG (Recital 8);
- ▲ the obligation for reporting should be phased in, starting with transmitting fundamental data available on the transparency platforms of ENTSOG (Recital 11);
- ▲ ENTSOG shall, on behalf of market participants, 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. 9);
- ▲ ENTSOG is obliged to make the said information available to ACER as soon as it becomes available on its TP (Art. 9).

**Commission 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 ten 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) No. 347/2013 of 17 April 2013 on guidelines for trans-European energy infrastructure and repealing Decision No 1364/2006/EC and amending Regulations (EC) No. 713/2009, (EC) No. 714/2009 and (EC) No. 715/2009**

- ▲ By 16 November 2013, ENTSOG was obliged to develop, submit to Member States, the Commission and ACER and after relevant approval by the EC, to publish the methodology, including on network and market modelling, for a harmonised energy system-wide cost-benefit analysis at Union level for projects of common interest (Art. 11);
- ▲ It is the obligation of ENTSOG to update the CBA Methodology according to Art. 11
- ▲ by 31 December 2016, both ENTSOs were obliged to jointly submit to the Commission and ACER a consistent and interlinked electricity and gas market and network model including both electricity and gas transmission infrastructure as well as storage and LNG facilities, covering the energy infrastructure priority corridors and areas (Art. 11);
- ▲ Involvement in the process dedicated to the regional list of project of common interests (Annex III);

**Regulation (EU) No. 994/2010 of 20 October 2010 concerning measures to safeguard security of gas supply and repealing Council Directive 2004/67/EC (so-called *SOS Regulation*)**

- ▲ Where an infrastructure investment is of cross-border nature, ENTSOG should be closely involved in order to take better account of the cross-border implications (Recital 15);
- ▲ The Union-wide Ten-Year Network Development Plan drawn up by the ENTSOG is a fundamental tool to identify the required investments needed at Union level in view of implementing the infrastructure requirements laid down in this Reg. (Recital 32);
- ▲ ENTSOG is member of the Gas Coordination Group and must be consulted in that context (Recital 34);
- ▲ the national and joint Preventive Action Plans, in particular the actions to meet the infrastructure standard, shall take into account the Union-wide Ten-Year Network Development Plan elaborated by ENTSOG (Art. 5);
- ▲ the Gas Coordination Group, established to facilitate the coordination of measures concerning security of gas supply, must be composed of representatives of ENTSOG (Art. 12);
- ▲ Being a member of the Gas Coordination Group, ENTSOG should be fully involved, within its areas of responsibility, in the process of cooperation and consultations at Union level (Recital 33).



**Commission 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 has facilitated the establishment of joint booking platforms (Art. 37).
- ▲ ENTSOG is 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 shall 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 Article 8(8) and (9) of Regulation (EC) No. 715/2009. 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 network codes and the Guidelines on the harmonisation of applicable rules aimed at facilitating market integration. (EC 715/2009 Art. 8,8)

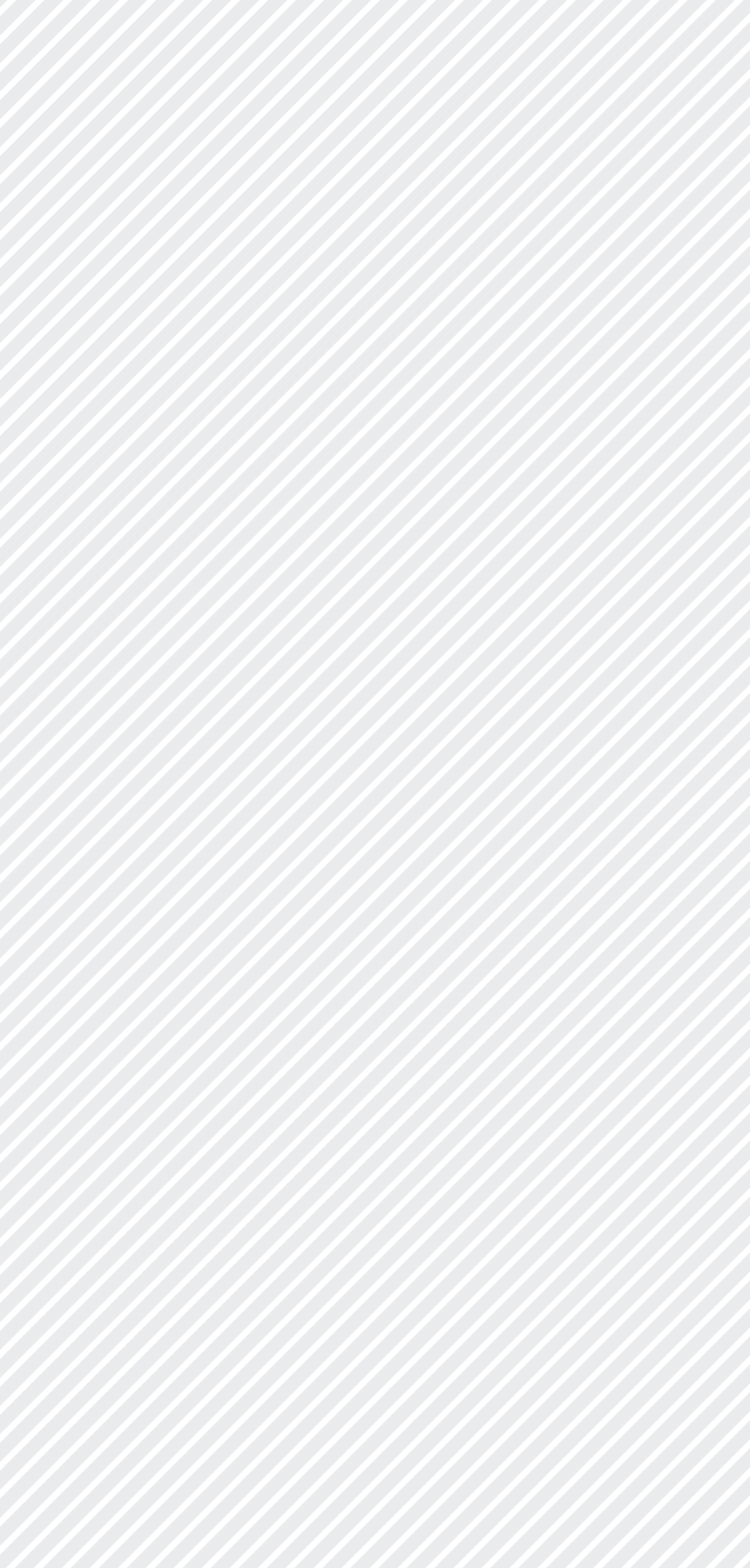
**Commission Regulation (EU) 2017/460 of 17 March 2017 *establishing a network code on harmonised transmission tariff structures for gas (the TAR NC)***

- ▲ in order to assist ACER in its implementation monitoring, ENTSOG shall monitor and analyse in accordance with Article 8(8) and (9) of Regulation (EC) NO 715/2009 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).



# Abbreviations

<b>ACER</b>	Agency for the Cooperation of Energy Regulators
<b>AWP</b>	Annual Work Programme
<b>BAL NC</b>	Network Code on Gas Balancing of Transmission Networks
<b>BOA</b>	ENTSOG Board
<b>BRS</b>	Business Requirements Specifications
<b>CAM</b>	Capacity Allocation Mechanisms
<b>CAM NC</b>	Network Code on Capacity Allocation-Mechanisms in Gas Transmission Systems
<b>CBA</b>	Cost-Benefit Analysis
<b>CEN</b>	European Committee for Standardisation
<b>CMP</b>	Congestion Management Procedures
<b>CNOT</b>	Common Network Operations Tools
<b>EC</b>	European Commission
<b>ENTSO-E</b>	European Network of Transmission System Operators for Electricity
<b>ENTSOG</b>	European Network of Transmission System Operators for Gas
<b>EU</b>	European Union
<b>EWS</b>	Early Warning System
<b>FG</b>	Framework Guidelines
<b>GCG</b>	Gas Coordination Group
<b>GIE</b>	Gas Infrastructure Europe
<b>GRIP</b>	Gas Regional Investment Plan
<b>INT NC</b>	Network Code on Interoperability and Data Exchange Rules
<b>INT WG</b>	Interoperability Working Group
<b>LNG</b>	Liquefied Natural Gas
<b>MIG</b>	Message Implementation Guidelines
<b>PCI</b>	Projects of Common Interest
<b>R&amp;D</b>	Research and Development
<b>REMIT</b>	Regulation on Energy Market Integrity and Transparency
<b>RES</b>	Renewable Energy Sources
<b>TAR NC</b>	Network Code on Harmonised Transmission Tariff Structures for Gas
<b>TAR FG</b>	Framework Guidelines on Transmission Tariff Structures for Gas
<b>TEN-E</b>	Trans-European Energy Networks
<b>TSO</b>	Transmission System Operator
<b>TYNDP</b>	Ten-Year Network Development Plan
<b>UGS</b>	Underground Gas Storage



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