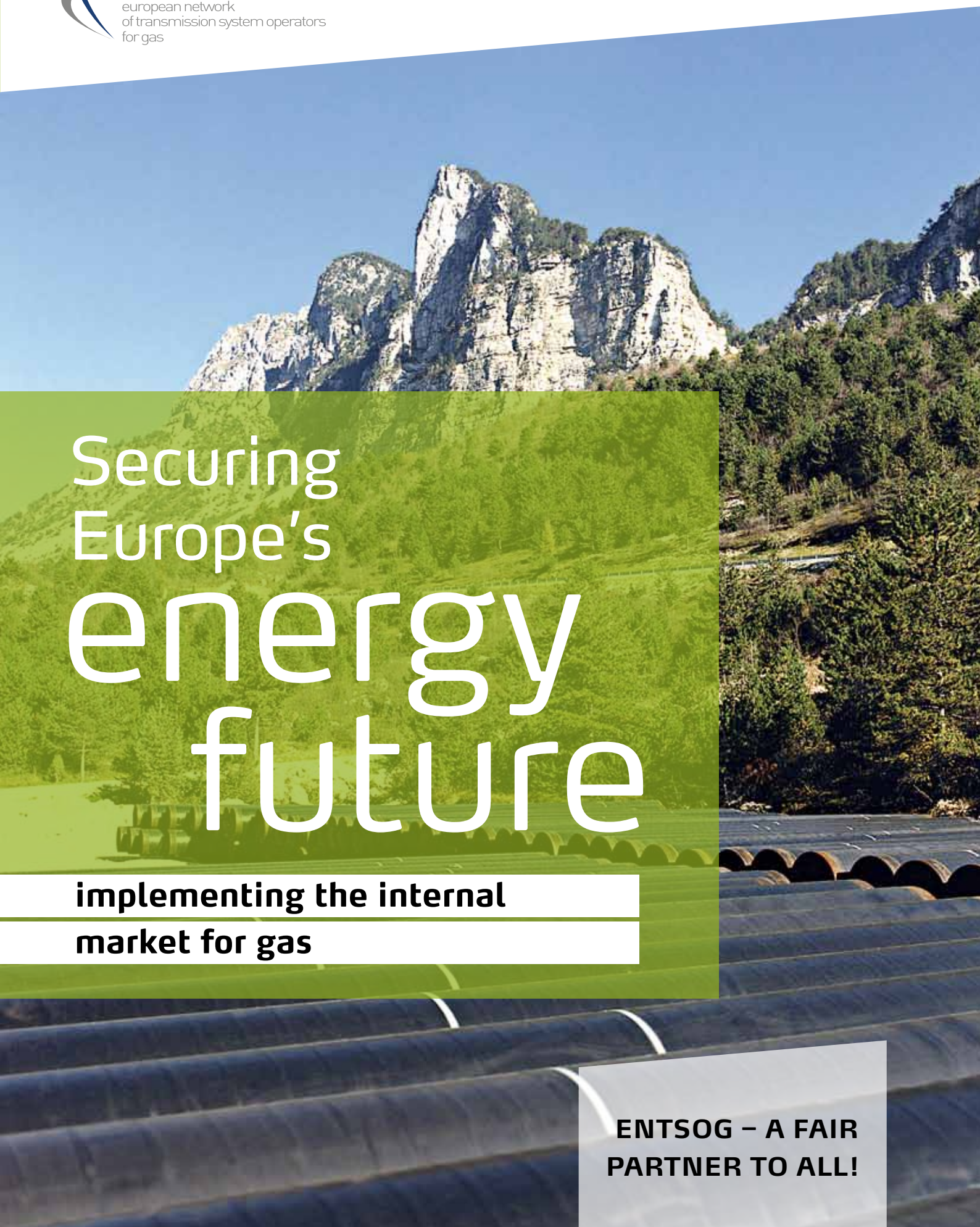
entsog

european network
of transmission system operators
for gas

ANNUAL REPORT **2014**



Securing Europe's energy future

implementing the internal market for gas

ENTSOG – A FAIR PARTNER TO ALL!

Key Facts 2014

Length of the high-pressure pipeline network:
242,000 km

Total natural gas demand in Europe:
409 bcm

Directly employed staff:
49,540 people

Share of natural gas in EU energy mix:
23,1%

Total power installed in all compressor stations:
12,500 MW

Data based on all ENTSOG members, associated partners and observers, see page 43

Source: primary energy consumption, "Statistical Report 2014", eurogas

Image courtesy of Gas Connect Austria

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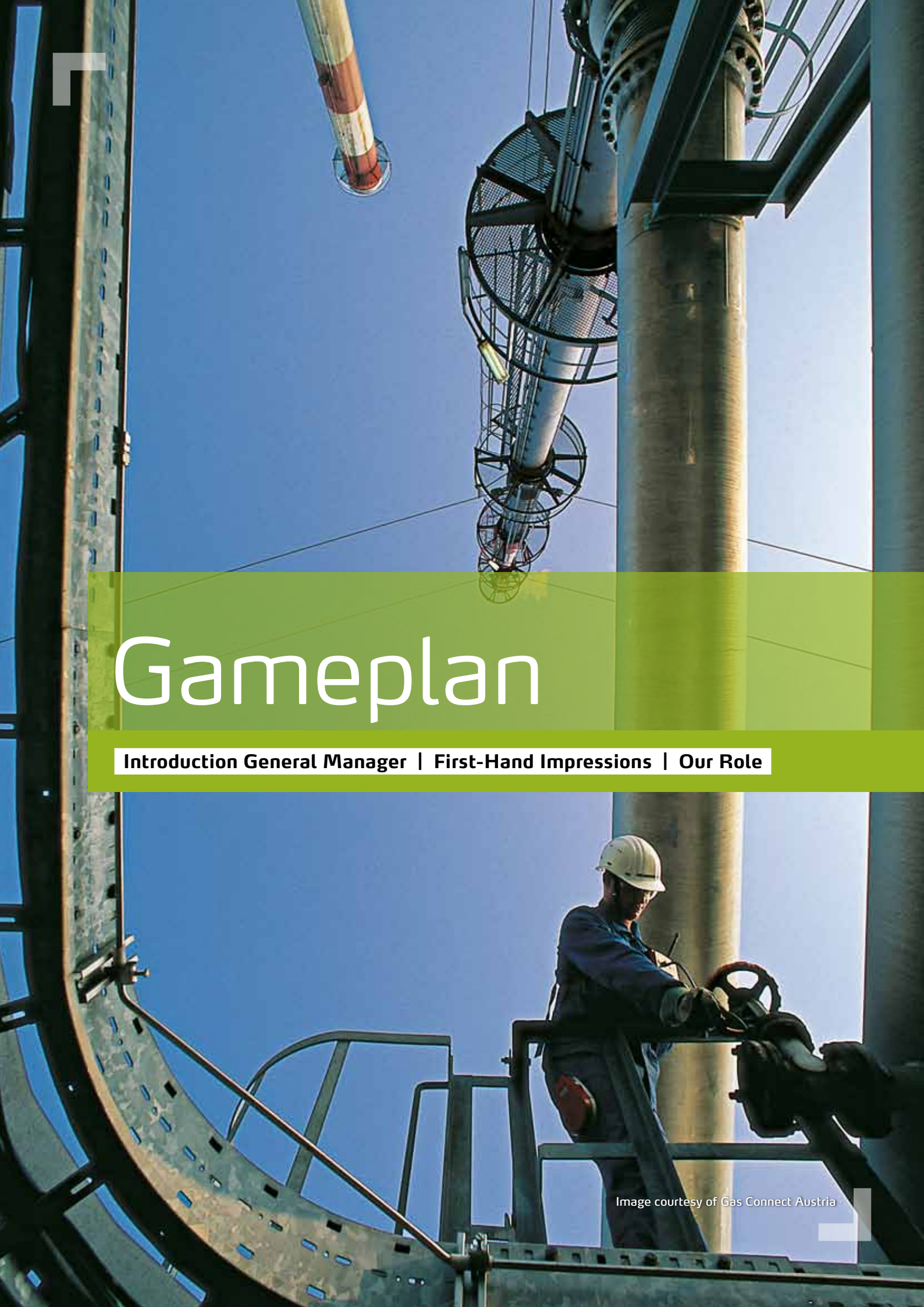


Image courtesy of Gas Connect Austria

Introduction

It was an ambitious and highly successful year for us at ENTSOG in 2014. Our two foremost accomplishments were the draft of the new tariff network code (TAR NC) and the first amendment to the capacity allocation mechanisms network code (CAM NC).

TAR NC was one of the most contentious topics that ENTSOG had been asked to develop and it generated much discussion between ENTSOG's members and stakeholders. In line with the results achieved in the previous year, ENTSOG successfully held open discussions with stakeholders and institutions. Another positive experience in 2014 was the work we put into the interoperability network code (INT NC) through the gas committee process. Here, ENTSOG made fundamental contributions to solving and addressing some of the major issues.

While preparing a new version of the Ten Year Network Development Plan (TYNDP), the crisis between Ukraine and Russia began to escalate and ENTSOG was called upon in an advisory capacity by the European Commission. Here we helped by assessing various European gas market scenarios that could result from long term disruption to the Russian gas supply. ENTSOG provided a leading advisory voice on this issue and utilised some of their own specially developed tools. We would like to extend our gratitude to the entire gas sector for acknowledging our role in dealing with issues of this nature.

ENTSOG successfully held open discussions with stakeholders and institutions

VITTORIO MUSAZZI
General Manager, ENTSOG

While preparing a new version of the Ten Year Network Development Plan (TYNDP), the crisis between Ukraine and Russia began to escalate and ENTSOG was called upon in an advisory capacity by the European Commission

On 17 December 2014, ENTSOG celebrated its fifth anniversary. It has been five years of intense work! After our foundation in December 1 2009, not many expected that just five years later we would auspiciously deliver on so many fronts. To be certain, our success is largely attributable to the excellent relationships we have enjoyed with our many stakeholders and institutions.

In reflecting on the past year, I personally would like to thank ENTSOG's members for their active participation in our work as well as the Brussels team for their ceaseless support in promoting our activities. Furthermore, I wish to extend my gratitude to the institutions and the stakeholders who have actively supported ENTSOG over these past five years with their open opinions and fair discussions.

Vittorio Musazzi
General Manager, ENTSOG

Image courtesy of Energinet.dk

First-Hand Impressions

For years these pages were dedicated to the foreword of Stephan Kamphues, the ENTSOG president. Instead of sharing his thoughts about ENTSOG, our president was interested in the opinions of our Brussels Team Members. Therefore this space is devoted to some of our colleagues, seconded from European Transmission System Operators, who share "first-hand impressions" of their work in different areas of our association.

Davide Volzone
Subject Manager,
System Operation
since 2013

DAVIDE VOLZONE

Subject Manager with focus on Transparency

ENTSOG promotes closer cooperation between Europe's TSOs in order to ensure the development of a Europe-wide transmission system in line with European Union energy objectives. ENTSOG's stakeholders know that its role is not only that of an association able to represent their Members in Europe, but is also that of an entity that proposes solutions. These solutions always take into account requests and advice received from external stakeholders with the aim of improving the European gas market.

Indeed, the decisions to be made in ENTSOG are discussed both in the different Working Groups and with the stakeholders, who always have the opportunity to voice their opinions at special workshops or meetings. The many meetings held with external stakeholders demonstrate ENTSOG's balanced role in the gas market. The openness of those working at ENTSOG with respect to external opinions not previously considered is further proof of our motto 'a fair partner to all Working in ENTSOG means being actively part of Europe and feeling yourself as an actor in the creation of the Internal Energy Market. Moreover, you have the opportunity to interact and work with people coming from all European countries, who have different ways of thinking and cultures, and elements which contribute to opening your mind.

Working in ENTSOG means being actively part of Europe and feeling yourself as an actor in the creation of the Internal Energy Market.

In addition, the work environment is very collaborative and all colleagues are always available to cooperate. The continuous points of views exchanged with your colleagues enhance the flexibility of your mind and enable you to be more dynamic during the decisional process. Moreover, you can learn the gas market rules of the European countries with the aim of harmonising them. You feel like you are in the heart of Europe and you can contribute to its improvement.

Mark Wiekens
Subject Manager, Market
since 2013

MARK WIEKENS

Subject Manager with focus on Incremental

Located in the centre of Europe, ENTSOG has close contacts with all stakeholders. Where TSOs physically connects all stakeholders along the value chain, ENTSOG performs this function on a European level in bringing together all parties from producers, to shippers and traders, and of course final consumers. Together we discuss and develop the proposals how to most effectively reach the policy goals set out by regulators and legislators. Driven by the technical expertise of its members, ENTSOG is excellently placed to balance all the different interests and produce the high-quality network codes that the Internal Energy Market needs. Developing network codes is a process we conduct jointly with all stakeholders. Via stakeholder joint working sessions, public consultations and a stakeholder support phase we enable their full involvement. The feedback this generate shows a great appreciation for the processes that ENTSOG conducts. Therefore I can say it is not just my opinion, but it is the stakeholders themselves who tell us that ENTSOG is a fair partner.

Working abroad is always an exciting way to get to know a different country and culture. Working for ENTSOG, however, means getting to know 26 countries and 44 TSOs; in fact it means getting to know the whole of Europe. Although each TSO has its specific characteristics, we have many things in common and have many shared interests. Capturing shared interests into concrete action can sometimes be a challenge and in order to find the exact right words, one needs to listen to and understand all of its partners.

Although each TSO has its specific characteristics, we have many things in common and have many shared interests.

Representing Europe's TSOs within ENTSOG: that is the core of my job. I have had the privilege to work with an incredible wide variety of people from all parts of Europe, industry sectors, company departments and seniority levels. Each of them a specialist in their own field, meaning that from each of them I can learn something new. This makes working for ENTSOG an inspiring experience.

Image courtesy of Infrastrutture Trasporto Gas

Conventional recoverable gas resources are equivalent to over 120 years of current global consumption.

Malcolm Arthur
Subject Manager, Market
since 2014

MALCOLM ARTHUR

Subject Manager with focus on Tariffs

The development of European network code requires the close cooperation of all of our members. Such rules and regulations will have far-reaching impacts and we need to ensure that all members have the opportunity to be part of the development process, either directly (such as attending meetings) or indirectly (such as providing comments on documents). The development of a robust and meaningful network code relies on our members being active in providing feedback on what is important to them. At ENTSOG, our role is to ensure that we take into consideration all this feedback when making any proposals and representing these views externally. In considering all opinions expressed, ENTSOG aims to provide a balanced view, ensuring that it is a fair partner to all.

ENTSOG's role puts it at the heart of Europe's pan-European gas transmission system.

ENTSOG's role puts it at the heart of Europe's gas transmission system. With the aim of increasing European market integration, ENTSOG is continuing the development the rules, regulations and information that will help facilitate this process. At ENTSOG, we need to broaden our understanding of the current and future role of gas in the energy mix across all Member States (and beyond) and ensure that our proposals meet the current and longer term goals. Working with our members, stakeholders, ACER and the European Commission allows us to contribute to the development of the European market place.

Our Role

ENTSOG (European Network of Transmission System Operators for Gas) works to facilitate and enhance cooperation between Europe's various gas transmission system operators (TSOs) and to support the development of a European transmission system in line with Europe's energy goals.

In pursuit of this overarching objective, ENTSOG strives to complete an internal European market for gas and stimulate cross-border trading, and to establish efficient and well-coordinated management practices. At the same time, ENTSOG is facilitating the technical evolution of Europe's gas network in a sound manner.

ENTSOG's tasks are defined in Regulation (EC) No 715/2009. This includes developing network codes for market and system operation, elaborating 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.

NETWORK CODES

ENTSOG develops network codes (NC) containing rules on how to integrate the gas market as well as for system operation and development. These NCs deal with subjects ranging from capacity allocation to network interconnections and operational security. The NC development process begins when the European Commission (EC) submits a request for a Framework Guideline from ACER (Agency for the Cooperation of Energy Regulators). Next, ENTSOG transforms the ACER Framework Guideline into a network code all the while conducting extensive public consultations. Once approved through the European comitology procedure, a network code becomes legally binding for all TSOs.

On the way to EU law and to implementation

- **CAM NC – Network Code on Capacity Allocation Mechanisms in Gas Transmission Systems**
  ENTSOG's first NC – published on 14 October 2013 as Regulation (EU) No 984/2013
- **BAL NC – Network Code on Gas Balancing of Transmission Networks**
  ENTSOG's second NC – published 26 March 2014 as Regulation (EU) No 312/2014
- **INT NC – Network Code on Interoperability and Data Exchange Rules**
  ACER recommendation to EC on 15 January 2014 – Comitology meetings in 2014 – published on 30 April 2015 as Regulation (EU) No 703/2015
- **TAR NC –Network Code on Harmonised Transmission Tariff Structures for Gas**
  Invitation to draft NC from EC on 19 December 2013 – draft completed by ENTSOG in December 2014
- **CAM NC Amendment for Incremental capacity**
  Invitation to draft NC amendment from EC on 19 December 2013 – draft completed by ENTSOG in December 2014
- **CMP Transparency Guidelines for Congestion Management Procedures**
  Implementation starting from October 2013

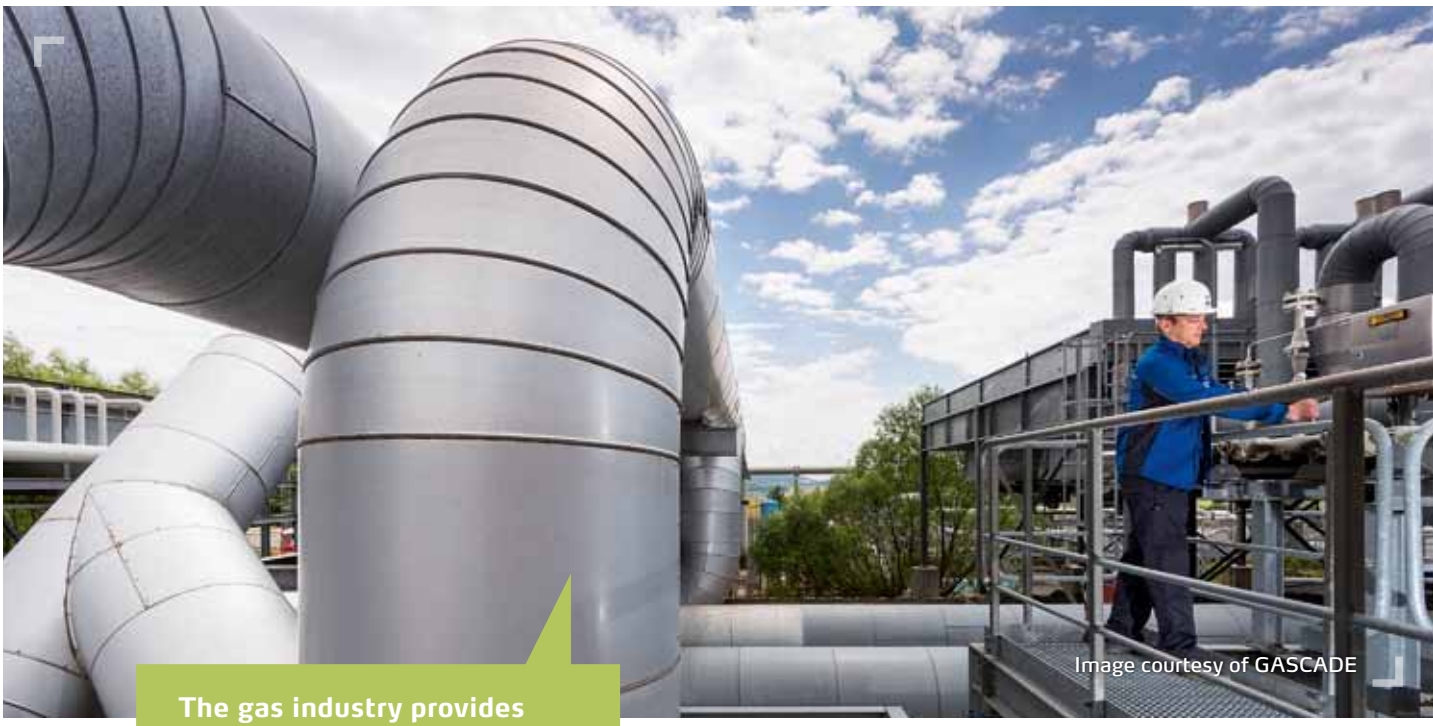


Image courtesy of GASCADE

The gas industry provides 305,000 jobs in Europe

NETWORK DEVELOPMENT PLAN

The Ten-Year Network Development Plan (TYNDP) provides a picture of the European gas infrastructure and its future developments, and it maps the integrated gas network according to a range of development scenarios. The TYNDP also includes a European Capacity Adequacy Outlook and an assessment of the network resiliency. Gas Regional Investment Plans (GRIPs) led by TSOs with ENTSOG assistance complement the TYNDP by focusing on issues of particular regional importance.

ADEQUACY FORECASTS

The aim of seasonal Supply Outlooks is to give an overview of how the European gas system can potentially cope with the main challenges of the season ahead. This is done by taking into account the latest supply and demand trends captured by seasonal Reviews. ENTSOG's Annual Summer and Winter Supply Outlooks review projections for the gas supply, demand and capacity of the near future. Supply Reviews analyse the actual situation over a particular period.

OPERATIONAL TOOLS

Regulation (EC) 715/2009 also envisages the use of common network operation tools to ensure the transparency and coordination of network operations under normal and emergency conditions.

Going for Goals

Organisation | ENTSOG Deliverables 2014 | Work Programme Status | Collaboration with the Energy Community | Targets 2016

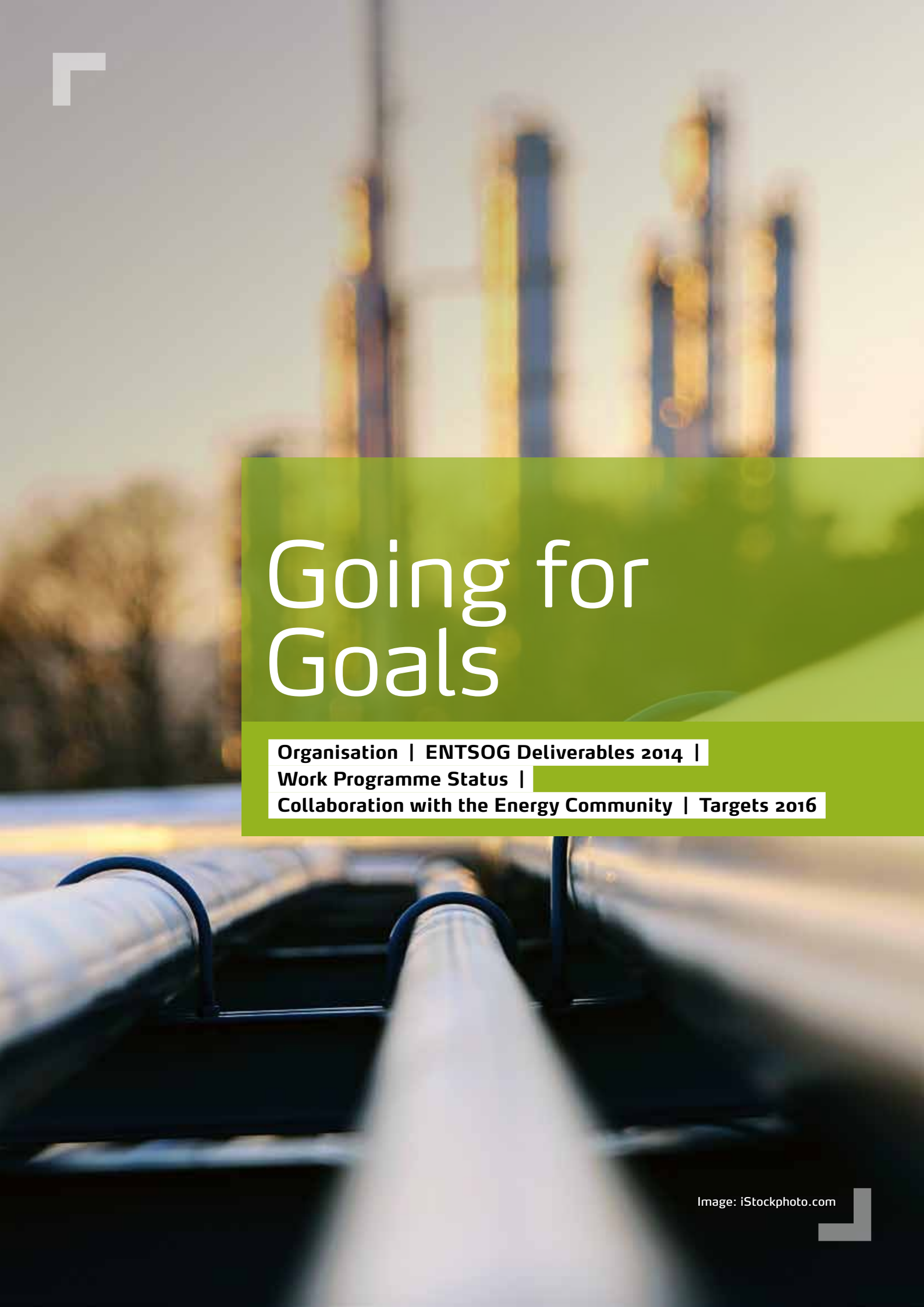


Image: iStockphoto.com

Organisation

In 2014, our members, associated partner, observers and Management Board underwent the following changes:

- The General Assembly endorsed the recommendation from the ENTSOG Board to accept Reganosa s.a. (Spain) and BBL Company V.O.F. (Netherlands) as members from 1 July 2014.
- On 1 September 2014 Gas Connect Austria took over BOG, which reduced the number of Austrian TSOs.
- Changes on Board level started on 8 January 2014 when Vladimir Outrata (NET4GAS) informed the Board that he gave up his seat on 16 December 2013. As a consequence NET4GAS proposed to the Board Andreas Rau as a replacement.
- On 16 January 2014 the Board accepted the proposal of the temporarily replacement of Vladimir Outrata with Andreas Rau (NET4GAS) as a Board Member. The General Assembly approved the proposal on 6 March 2014.
- In line with the Article of Association the General Assembly agreed and accepted the replacement of Harald Stindl (Gas Connect Austria) with Zoltán Gellényi (FGSZ), Andreas Rau (NET4GAS) with Milan Pavlik (eustream) and Dimitrios Kardomateas (DESFA S.A.) with Marjan Eberlinc (Plinovodi) in the ENTSOG Board until the end of the current term. These replacements became effective with 1 July 2014.
- In July 2014 Milan Pavlik resigned from eustream S.A. His company proposed Miroslav Bodnar as a replacement. On 11 September 2014 the Board accepted the proposal of the temporarily replacement. On 22 October 2014 the ENTSOG General Assembly unanimously accepted the suggested replacement until the end of the term.

Stephan Kamphues
President, Open Grid Europe, Germany

Ralph Bahke
ONTRAS, Germany

Andreas Rau
NET4GAS, Czech Republic

Miroslav Bodnár
eustream, Slovakia

Torben Brabo
Energinet.dk, Denmark

Helen Campbell
National Grid, United Kingdom

Francisco Pablo de la Flor García
Enagás, Spain

Dimitrios Kardomateas
DESFA, Greece

Marjan Eberlinc
Plinovodi, Slovenia

Harald Stindl
Gas Connect Austria, Austria

Zoltán Gellényi
FGSZ, Hungary

Annie Krist
Gasunie Transport Service, Netherlands

Gaetano Mazzitelli
Snam Rete Gas, Italy

Walter Peeraer
Fluxys, Belgium

Thierry Trouvé
GRTgaz, France

Rafał Wittmann
GAZ-SYSTEM, Poland

ENTSOG Deliverables 2014

JAN | FEB | MAR | APR | MAY | JUN

19 March
ENTSOG publishes Annual Report 2013

26 March
Network Code on Gas Balancing of Transmission Networks (BAL NC) published in European Journal

27 March
ENTSOG publishes Gas Regional Investment Plan (GRIP) South region

23 April
ENTSOG publishes Summer Supply Outlook 2014 and Summer Review 2013

15 May
ENTSOG publishes Gas Regional Investment Plan (GRIP) Baltic Energy Market Interconnection Plan (BEMIP) region

19 May
ENTSOG publishes Gas Regional Investment Plan (GRIP) Central Eastern Europe (CEE) region

4 June
ENTSOG publishes Gas Regional Investment Plan (GRIP) Southern Corridor (SC) region

30 June
ENTSOG opens public stakeholder consultation on Annual Work Programme 2015

19 December
ENTSOG publishes Annual Work Programme 2015

26 December
ENTSOG submits Drafted Incremental Proposal and drafted Network Code (NC) on Harmonised Transmission Tariff Structures for Gas to ACER

30 September
ENTSOG launches new Transparency Platform

30 September
Early Warning System with Early Warning Team East in place

JUL AUG SEP OCT NOV DEC

03 November
ENTSOG publishes Winter Supply Outlook 2014/15 and Winter Review 2013/14

03 November
ENTSOG publishes Report on Capacity Booking Platforms

12 November
ENTSOG publishes System Development Map 2013 in cooperation with Gas Infrastructure Europe

1 August
ENTSOG publishes Gas Regional Investment Plan (GRIP) South-North-Corridor (SNC) region

18 August
ENTSOG submits Adapted Energy System-Wide Cost-Benefit Analysis (ESW-CBA) Methodology to EC

Work Programme Status

These tables provide an overview of the activities in ENTSOG's three main business areas. The commented tasks originate from the Annual Work Programme 2014.

ACTIVITY	GOAL	DELIVERABLE & COMPLETION DATE	CONSULTATION WITH	STATUS / COMMENTS
MARKET				
BRS FOR NOMINATIONS	Finalise the Business Requirements Specifications for Nomination and Matching Procedures based on the Balancing Network Code	Draft BRS published by ENTSOG on 2 February 2014 for Public Consultation	Public Consultation on Draft BRS from 3 February – 14 March 2014	Amendment of BRS foreseen for Q1 2015
MONITORING AND REVIEWS RELATED TO THE BAL NC	Assess implementation plans of TSOs and NRAs for BAL NC	Implementation report published jointly by ENTSOG and ACER on 22 October 2014	Consultation with TSOs and ACER	Follow up on implementation plans requested by Madrid Forum
NETWORK CODE SUBMISSION (TAR NC)	Develop network code proposal	TAR NC was submitted to ACER on 26 December 2014	ACER, EC, TSOs, Stakeholders	TAR NC proposal scheduled for Comitology proceeding in 2015
IMPLEMENTATION ACTIVITIES CAM NC	CAM Road Map including list of Interconnection Points (IPs) where CAM NC is applied, Booking platform report, auction calendar 2014 / 2015	– Auction calendar 2014 / 2015 published in 01 / 2014 – CAM roadmap published in 10 / 2014 – Booking platform report published in 11 / 2014	ACER, TSOs, Market Stakeholders	– Road Map update foreseen October 2015 – Auction Calendar 2015 / 2016 scheduled for publication January 2015
CMP IMPLEMENTATION	Collect data and survey ENTSOG members for status of CMP implementation	Published in ENTSOG Annual Report on 2013	ACER, TSOs	Next publication of report in ENTSOG Annual Report 2014
INCREMENTAL CAPACITY (INC)	Establish a market-based process to satisfy all economically reasonable and technically feasible demand for capacity via an amendment of the CAM NC and a chapter in the TAR NC	Incremental Proposal was submitted to ACER on 26 December 2014	TSOs, ACER, EC, Market Stakeholders	All over the year stakeholder interaction took place. ENTSOG organised a series of public workshops and talks with ACER and EC Incremental Proposal is scheduled for Comitology proceeding in 2015
BUSINESS REQUIREMENT SPECIFICATION FOR CAM/CMP	Develop BRS to support CAM NC and CMP implementation by the TSOs	Throughout 2014 TSOs have developed documentation which will be consulted in 2015	TSOs	Stakeholders workshops and public consultation planned, scheduled to finish in April 2015

ACTIVITY	GOAL	DELIVERABLE & COMPLETION DATE	CONSULTATION WITH	STATUS / COMMENTS
SYSTEM DEVELOPMENT				
COST BENEFIT ANALYSIS METHODOLOGY	Publish an adapted methodology based on ACER and EC opinion	Publication on 18 August for EC final opinion	ACER, EC, Stakeholders	EC provided its final approval on 4 February 2015
SUMMER SUPPLY OUTLOOK 2014	Provide a view on injection period in the context of the Ukraine crisis	Publication on 23 April	Gas Coordination Group	Completed
SUMMER 2013 REVIEW	Analyse the supply and demand trends of previous summer	Publication on 23 April		Completed
WINTER SUPPLY OUTLOOK 2014-15	Provide a view on the supply/demand balance on the winter ahead	Publication on 3 November	Gas Coordination Group	Completed
WINTER 2013-14 REVIEW	Analyse the supply and demand trends of previous winter	Publication on 3 November		Completed
TRANSMISSION CAPACITY MAP 2014	Provide an overview of annual capacity at IP level	Publication on 12 June		Completed
SYSTEM DEVELOPMENT MAP 2013	Provide a graphical representation of supply and demand for the past year	Publication on 12 November		Completed
SUPPORT TO GAS COORDINATION GROUP	Make available TSO expertise in the area of security of supply	Modelling of Stress Tests sent to European Commission on 24 September	EC, Member States, ACER and main associations	Continuous task Completed for Stress Test
SUPPORT TO REGIONAL GROUPS	Bring technical expertise during the second PCI selection	Non-applicable		Support to Regional Groups – Completed for 2nd GRIP edition
SUPPORT TO TSOs FOR GRIPS	Support in the modelling and layout of reports	Last GRIP (2nd edition) published in August 2014		Completed
ANALYSIS OF GAS DEMAND	Prepare framework for demand scenarios	Two demand scenarios included in TYNDP 2015	ACER, EC, Stakeholders	Continuous task Completed for TYNDP 2015
ANALYSIS OF SUPPLY FLEXIBILITY	Prepare framework for supply scenarios	Definition of range of supply for each source for TYNDP 2015 and Supply Outlooks	ACER, EC, Stakeholders	Continuous task Completed for TYNDP 2015
INVESTIGATION OF TRANSMISSION INFRASTRUCTURE ROLE IN SUPPORTING SUSTAINABILITY	Assess the ability of gas infrastructure to support RES development			Continuous task
ENTSOG MODELLING TOOL	Ensure the adequacy of the modelling tool with the assessment methodologies put in place by ENTSOG	Temporal modelling Power generation modelling	EC, ACER and stakeholders	Continuous task Completed for TYNDP 2015 and Supply Outlooks of 2014
DATA WAREHOUSE PROJECT	Ensure ENTSOG ability to efficiently collect and process data for deliverables and Transparency Platform	Under progressive commissioning between July and December	EC, ACER and stakeholders (for Transparency Platform part)	Completed before new evolutions

ACTIVITY	GOAL	DELIVERABLE & COMPLETION DATE	CONSULTATION WITH	STATUS / COMMENTS
SYSTEM OPERATION				
PROJECT PLAN FOR TRANSPARENCY WORKING GROUP	Establish a new Transparency Platform	The new Transparency Platform launched on 1 October 2014	TP users	Completed
	Transparency workshop: preparation and organisation	11 December 2014		Completed
	Improvement of TP data quality	Ongoing effort	TP users	In progress
	Follow-up REMIT	Support to ACER and EC for the elaboration of the REMIT Implementing Acts issued on December 2014	ACER/EC	Completed
PROJECT PLAN FOR INTEROPERABILITY WORKING GROUP	Finalise the INT NC proposal for Comitology	Support to ACER and EC to come to a final version of the NC for translation – 1st Comitology Meeting 10 July 2014	ACER/EC	Completed
	Follow-up of delivered Network Code on Interoperability and Data Exchange rules	Approval by Gas Committee and approval at the last Comitology meeting on 4 Nov 2014	ACER EC MS TSOs Stakeholders	Completed and shall apply from 1 May 2016
	CNOT: Review of BRSs for CAM/CMP and Nomination and Matching Process.	Support the working groups for the development of the CNOTs during 2014	Market Area Working Groups and Stakeholders	On-going and due June 2015
	Fine tuning of the AS4 Usage Profile documentation: Proof of concept for AS4 communication solution and Workshop	Proof of concept: March – August 2014	ACER, TSOs and Stakeholders	Completed Work continues on defining AS4 Message Headers and the management of certificates in 2015
		Workshop on 9 September 2014		
	Follow up of the Gas Quality standardisation work by CEN and the Pilot Project	Support CEN during 2014 meetings Reporting to Gas Quality Kernel Group and INT WG	CEN TC 234/WG 11 CEN PC 408 Marcogaz EEASE-Gas Member State TSOs CEN Members	In progress – Both standards expected to be published in 2015 Pilot project to be reactivated in 2015
	Coordination with third countries	Evaluation of possible application of business rules coming out of the NC INT and DE.	ACER EC Member TSOs Third country TSOs Stakeholders	In progress – workshop planned for 2015 for Business Rules adaptation
		Encourage Involvement of the third countries TSOs in the EWS		Ukrtransgaz on board of the EWS, further countries expected to come on board during 2015
	Operate the LIO	Delivery of EIC codes	ENTSO-E	on-going
		Description of the LIO Tool	Market Participants	Finalised 2014
		Revision of the EIC Reference Manual		on-going due 4/2015
	Development and implementation of Early Warning System	The implementation of the EWS with the Early Warning Team East for the East European Borders due on 1 October 2014	ACER EC Energy Community Member States and Non-Member States TSOs GAZPROM Stakeholders	Completed – Now progressing to implement the EWS for North West Europe expected for 1 July 2015

Collaboration with the Energy Community

Ever since its founding, ENTSOG has closely supported the work of the Energy Community. The Energy Community is an international organisation dealing with energy policy. The Energy Community is an international organisation dealing with energy policy whose mission is to extend the EU internal energy market to South East Europe and beyond on the basis of a legally binding framework. The organistion was founded by a treaty in October 2005 in Athens, Greece. The parties to the treaty are the European Union and eight contracting parties from South-East Europe and the Black Sea region.

In 2014, ENTSOG engaged the cooperation of the Energy Community in different ways. According to Regulation (EC) 715/2009, ENTSOG has to adopt recommendations relating to the coordination of technical cooperation between Member States and third country transmission system operators. ENTSOG and the Energy Community Secretariat agreed, in a meeting held at the premises of the Secretariat in Vienna on 1 October 2014, to continue the positive cooperation that started in 2013. It was agreed to have a working level meeting in the first half of 2015. The aim is to support the contracting parties to the Energy Community in adopting business rules resulting from the Code.

In addition, it was agreed to engage with third country TSOs to develop the Early Warning System, especially given the crisis in Ukraine. Therefore ENTSOG presented the Early Warning

Gas contributes to significantly decrease particulate pollution (such as SO_2 or NO_X), which has a proven negative impact on health and quality of life

Image courtesy of bayernets

System in the scope of the agenda of the Security of Supply Coordination Group.

The 3rd meeting of the GAS Sub Group was held in Ljubljana, Slovenia on 7 October 2014. The participants were highly engaged and asked ENTSOG to further involve the third countries in the development of the Early Warning System. ENTSOG welcomed this and promised to take this further in order to strengthen cooperation with third countries, in line with Annex IV of Regulation 994/2010.

ENTSOG participated in and/or co-hosted several workshops of the Energy Community during the last years on the network codes CAM/CMP and Balancing to present the requirements set out in these and to provide assistance to Energy Community contracting parties in the implementation process. On 27 November 2014, ENTSOG and the Energy Community Secretariat held a joint workshop on the implementation practices of the Balancing NC, focusing on the implementation challenges of TSOs in Central and Eastern Europe. ENTSOG and the Energy Community concluded to share possible solutions when implementing network codes, e. g. the implementation of booking platforms for transport capacity.

The continuous relationship with the Energy Community Secretariat has evolved in parallel and bilateral relationship with some of the contracting parties. As a result Bosnia & Herzegovina and the Former Yugoslav Republic of Macedonia are fully covered in the Summer 2015 and Winter 2014/15 Supply Outlooks.

The TYNDP 2015 offered the opportunity to put infrastructure projects in the region into the whole European perspective.

ENTSOG and the Energy Community Secretariat are targeting the extension of this collaboration to adjacent contracting parties such as Serbia and Ukraine. Such extension of the geographical scope of Supply Outlooks and TYNDP will be mutually beneficial. It will make ENTSOG assessments more robust in taking into account the interaction between the EU gas market and surroundings areas.

Image courtesy of GASCADE

Targets 2016

Image courtesy of Gasum

Vehicles powered by natural gas produce 20–30% less carbon dioxide than vehicles powered by petrol. Sulphur, NO_X and carbon monoxide and particulate matter emissions can all be significantly cut by switching from oil to gas in long-haul trucks and cars in fleets.

During 2016, ENTSOG will be in the process of monitoring the implementation of the BAL NC which will be applicable by 1 October 2015 and the CAM NC, which will be applicable by 1 November 2015 – as well as the CMP Guidelines. Our main task here will be to monitor their implementation as well as the functionality of the network codes. Some parts of INT NC will be implemented starting in May 2016.

A new edition of TYNDP is now foreseen for the last quarter of 2016 and this will surely keep ENTSOG and its members occupied throughout much of 2016.

From the initial implementation phase to the analysis of results, we have identified the revision needs for existing network codes and also introduced new ones. During 2016, some network codes will be analysed from an operational perspective and this will effect how new network codes are considered and drafted during 2017.

By remaining steadfast in our work, ENTSOG will be able to develop and release TYNDP as well as several new network codes while striving to implement an effective internal energy market for Europe.

Playing Well Together

Market Area | System Developement Area
System Operation Area
Implementation and Monitoring of New Regulations

Image courtesy of GASCADE

Market Area

ENTSOGs Market Team is responsible for the market-related network codes that will promote the internal European gas market. In 2014 the team worked on one new code: TAR NC (Harmonised Transmission Tariff Structures for Gas) and one new amendment to the CAM NC (capacity allocation mechanisms) on incremental capacity (INC Proposal). Furthermore the team has continued to implement and monitor the codes already adopted within the market area: CAM NC (capacity allocation mechanisms), BAL NC (gas balancing) and CMP (guidelines on congestion management procedures).

AREA STRUCTURE IN 2014

The Market Area work is organised into 3 main working groups as well as a number of advisory kernel groups with more specialised tasks.

Capacity Working Group

The Capacity Working Group (CAP WG) is responsible for ENTSOG's activities related to the allocation of **existing capacity** (CAM NC, REG (EU) No 984/2013) and **congestion management** (Guidelines on Congestion Management Procedures (CMP), Commission Decision of 24 August 2012 on amending Annex I to Regulation (EC) No 715/2009).

During 2014, CAP WG implemented monitoring tasks for the CAM NC and CMP guidelines, monitored obligations and defined business requirements specifications for the CAM NC and CMP guidelines.

CAP WG also contains the three following kernel groups for detailed tasks:

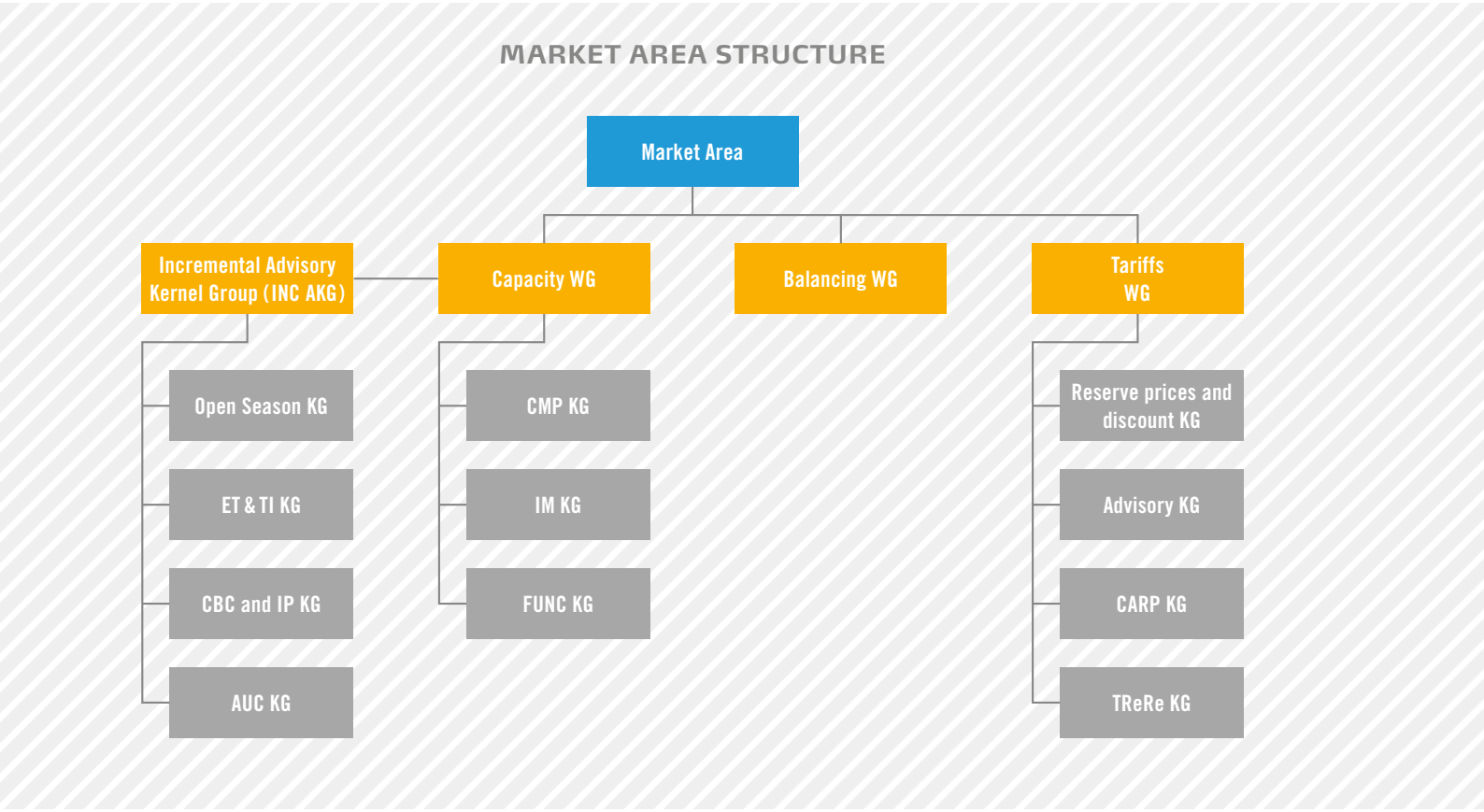
- **CMP KG** (Congestion Management Procedures KG)
- **IM KG** (Implementation & Monitoring KG: formerly Adjacent TSO Cooperation [ATSO KG])
- **FUNC KG** (Functionality KG formerly Capacity Products and Conditions [CPC] KG)

Incremental Advisory Kernel Group

The Incremental Advisory Kernel Group (INC AKG) has developed and drafted proposals for incremental capacity under the formal responsibility of the CAP WG. The work of the INC AKG is closely coordinated with the TAR WG concerning the economic test and tariffs for incremental capacity. The work of the INC AKG has been organised in 4 kernel groups:

- **AUC KG** (Auctions and when to offer)
- **CBC&IP KG** (Cross-border coordination and information provision)
- **ET&TI KG** (Economic test and tariff issues)
- **OS KG** (Open seasons)

Since all of the INC AKG kernel groups successfully concluded their work, they were disbanded at the end of 2014.



Balancing Working Group

The Balancing Working Group (BAL WG) is responsible for the Balancing Network Code (BAL NC). In the future, BAL WG will focus on implementing the network codes, monitoring obligations and business requirements specifications. BAL WG also runs the Common Network Operations Tools task force jointly with the Interoperability Working Group (INT WG).

Tariff Working Group

The Tariff Working Group (TAR WG) is responsible for developing and drafting the TAR NC which was submitted to ACER at the end of 2014. Detailed work on specific issues is carried out in the following 4 kernel groups:

- Advisory KG
- CARP KG (Cost Allocation and Reference Price)
- ResDis KG (Reserve Prices and Discounts)
- TReRe KG (Transparency and Revenue Recovery

ACTIVITIES IN THE MARKET AREA IN 2014

Capacity Working Group

Capacity Allocation Mechanisms Network Code (CAM NC)

CAM NC came into effect in November 2013 with an implementation target of November 2015. In 2014, ENTSOG voluntarily facilitated early implementation of this network code through the ACER/ENTSOG CAM Roadmap publication and related workshop.

In December 2014, ENTSOG launched the implementation monitoring process for CAM NC Art. 6. Here, ENTSOG coordinated the calculation of how much bundled capacity is to be implemented by February 2015. This monitoring process is required by Article 8 (8) of Regulation (EC) No 715/2009. ENTSOG launched the process in order to ensure timely publication of results in Annual Report 2014.

In addition to the implementation monitoring tasks, ENTSOG has also carried out the following tasks within the CAP WG:

- Worked on developing business requirements specifications for CAM NC
- Carried out public consultation to identify market needs for booking platforms and issued findings in the Booking Platform Report
- Initiated a work stream with stakeholders focussing on matters related to cross-border functionality of network codes with the aim of identifying methods of improving practical application of network codes.

Congestion Management Procedures (CMP)

ENTSOG began to monitor implementation of CMP guidelines in January 2014 and published the results in Annual Report 2013 and in order to ensure timely publication of results in Annual Report 2014 launched the next monitoring process in November 2014. This monitoring is required by Article 8 (8) of the Regulation (EC) No 715/2009. Moreover, ENTSOG monitored the consistency of CMP implementation across IPs. This involved assessing the capacity surrender procedures used by various TSOs, the compatibility of oversubscription and 'buy-back' schemes with 'firm day-ahead' (FDA) or 'use-it-or-lose-it' (UIOLI) mechanisms.

Incremental Capacity

During 2014, ENTSOG drafted the Incremental Proposal as an amendment to CAM. The Incremental Proposal suggests how, in close collaboration with stakeholders, new capacities can be offered. Starting from ACER's Guidelines on Incremental Capacity and Framework Guidelines for TAR NC, these concepts were developed in a series of five Stakeholder Joint Working Sessions (SJWSs), a Kick-off Workshop, a public consultation, a Stakeholder Support Process (SSP) as well as a number of meetings with key stakeholders (Prime Movers).

The ENTSOG incremental proposal consists of two parts:

1) Amendment to CAM NC to establish a process of offering and allocating incremental capacities;
2) Chapter 9 of the TAR NC dealing with the financial regulatory parameters and tariff-related issues of incremental capacity

Since they are so closely interrelated, the Incremental Proposal and the network code on Tariffs are carefully coordinated.

On 26 December 2014, ENTSOG submitted the Incremental Proposal to the European Commission and ACER in accordance with the established deadlines and project plan.


Image courtesy of Gassco

Natural gas is more affordable to transport than electricity.

Balancing Working Group

The Network Code on Gas Balancing in Transmission Networks – Commission Regulation (EU) No 312/2014 – passed comitology and was published in the EU Official Journal in March 2014. During 2014, BAL WG focussed on implementing the requirements set out in BAL NC before applying the network code in the respective member states. To assess the implementation plans of the individual TSOs and NRAs, ENTSOG and ACER conducted a joint report, in which the implementation status of the BAL NC in each member state was identified. The report contains a number of practices that can be useful when implementing the BAL NC. The report is available on the ENTSOG and ACER websites.

In addition to this, BAL WG finalised the business requirements specifications for the Nomination and Matching (NOM BRS) procedures and conducted a public consultation on the matter during March/April 2014. NOM BRS defines the data exchange processes between TSOs and network users in the nomination and matching process and furthermore provides a framework for introducing single-sided nominations for bundled capacity products. Thereby, ENTSOG provides the tools required for the single-sided nomination procedure set out in CAM NC.

Tariff Working Group

Following an EC invitation in late 2013 to draft a Network Code on Harmonised Transmission Tariff Structures for Gas (TAR NC), ENTSOG intensified its tariff-related activities throughout 2014. This culminated in the submission of the draft Network Code on Harmonised Transmission Tariff Structures for Gas to ACER on 26 December 2014. In addition to TAR NC, ENTSOG were also requested to carry out an impact assessment of harmonisation of the tariff year. This was also submitted to ACER at the same time.

Throughout the year, ENTSOG placed great emphasis on stakeholder engagement and has organised a series of eight public workshops, including five Stakeholder Joint Working Sessions (SJWSs), a Kick-off Workshop, Consultation Workshop, a Refinement Workshop as well as a number of meetings with key stakeholders (Prime Movers). ENTSOG simultaneously participated in bilateral discussions with ACER and trilateral discussions with both ACER and the EC with a view to ensure a close alignment and understanding of the issues related to the drafting of the TAR NC.

ENTSOG also carried out two public consultations throughout 2014 regarding tariffs. The first consultation dealt with the initial draft of TAR NC published on 28 May while the second consultation was held in relation to the Stakeholder Support Process (SSP) launched on 7 November. A substantial number of responses and feedback was received from a wide variety of stakeholders in both consultations. ENTSOG used this feedback to create the final draft TAR NC.

Even though tariff-related activities will continue to present challenges throughout 2015, ENTSOG nonetheless successfully and punctually submitted TAR NC on 26 December 2014 despite the very tight timeframe.

Other activities

The ENTSOG Market Team also contributed to industry developments such as the Gas Target Model revision and the Bridge to 2025 paper conducted by ACER, participated in the EU-Russia dialogue and has been engaged the cooperation of the Energy Community.

System Development Area

The System Development business area covers all ENTSOG activities related to gas supply, demand and infrastructures. The main deliverables are short and medium-term assessments such as the Ten-Year Network Development Plan (TYNDP) and supply outlooks. In 2014, a cost-benefit analysis was adapted for selecting Projects of Common Interest (PCI) and assessing potential consequences of the Ukrainian crisis.

AREA STRUCTURE IN 2014

All activities of the System Development Business Area are managed by the Investment Working Group.

The Working Group (WG) is supported in its mission by four Kernel Groups (KGs), each of which focusses on specific areas:

- **Network Modelling Kernel Group (NeMo KG):** development and enhancement of ENTSOG's network modelling tool and performance of simulations in accordance with defined scenarios
- **Supply & Demand Kernel Group (S&D KG):** development of supply and demand approach for ENTSGO deliverables based on analysis of current situation and alternative scenarios. Particular focus is given to the analysis of S&D data to increase understanding of S&D development, identify trends and outline approaches for defining and studying future scenarios.
- **Energy Infrastructure Priorities Kernel Group (EIP KG):** adaptation of the Cost-Benefit Analysis methodology under the New TEN-E Regulation
- **Editing Kernel Group:** TYNDP editing and maintenance of terminological and stylistic consistency between reports

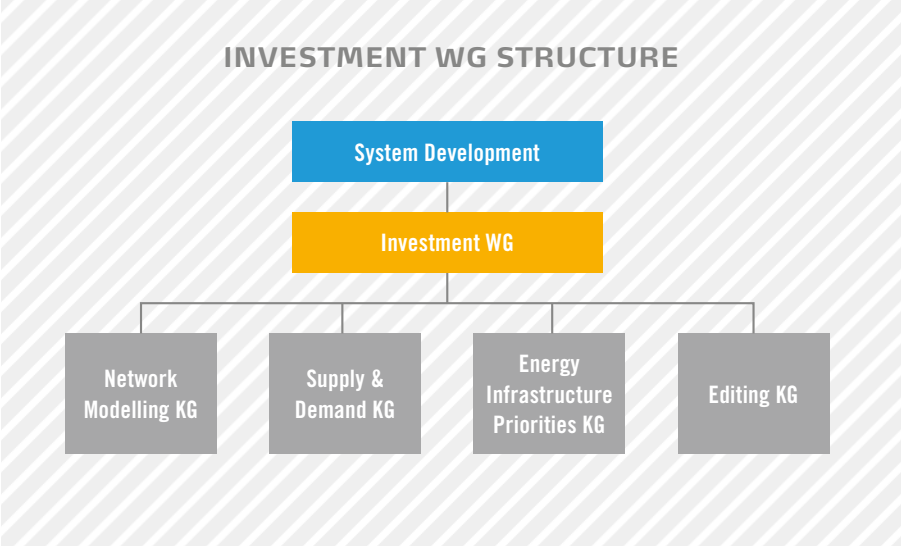


Image courtesy of Fluxswiss

Gas, when burnt to heat homes or for industrial uses, releases 25–30 % less CO_2 than oil per unit of energy produced.

SUMMER/WINTER SUPPLY OUTLOOKS AND REVIEWS

Supply Outlooks assess the season-ahead flexibility of the gas supply infrastructure under consideration of previous supply and demand trends.

Summer Supply Outlook explores the extent to which the market could reach high storage levels at the end of the season based on the actual storage level on 1 April of that year. The report has benefited from new modelling techniques with an optimised temporal approach that were developed for the purpose of the cost-benefit analyses (CBA). The robustness of the report is ensured by using the following sensitivity analyses:

- Various supply situations
- Different targeted stock levels at summer's end

Summer Supply Outlook 2014 identified sufficient flexibility in all parts of Europe. Incidentally, the storage levels reached on 1 October 2014 were the highest ever in recent history.

Winter Supply Outlook explores both the evolution of underground storage inventory throughout the winter and the demand-supply balance in situations of high daily demand. The aforementioned improved modelling approach has enabled a more consistent analysis of the influence of storage levels on UGS deliverability during periods of high daily demand. The robustness of the report is ensured by using the following sensitivity analyses:

- Various climatic profiles of winter
- Potential disruption of transit through Ukraine

Winter Supply Outlook 2014/15 confirmed the robustness of the gas infrastructure in most parts of Europe when facing short disruptions under severe climatic conditions. If South-Eastern Europe remains strongly dependent on the Ukrainian transit route, recently commissioned infrastructures will improve the situation compared to previous winters. These infrastructures now allow significant volumes of gas to be exported to Ukraine.

It is of note that the high storage levels achieved at the end of the summer were maintained until the beginning of winter.

The publication of **Seasonal Reviews** is an ENTSOG initiative based on internal supply/demand analyses carried out within the framework of TYNDP and Supply Outlooks. ENTSOG chose to publish these analyses and thus share the results with stakeholders so that feedback could be gathered. This initiative will help to establish a robust basis when defining the input data and methodology of subsequent reports. After having focused on the supply/demand balance, the reviews now go further in the understanding of the role of gas demand for power generation and give a view of flow patterns between the European balancing zones.

Reviews of summer 2013 and winter 2013/14 confirmed that the surge in coal power limited the role of natural gas in this sector. This had a negative impact on European CO_2 emissions and also eroded the confidence of institutions and industry on the medium to long-term future of gas.

TYNDP 2015

The fourth edition of the Ten Year Network Development plan was developed during 2014 and published early in 2015. It is the first report developed within the joint 3rd Energy Package and new TEN-E Regulation.

The first half of the year was dedicated to the Stakeholder Joint Working Session (SJWS) process. The aim was both to collect stakeholder feedback on the initial cost-benefit analysis (CBA) methodology released in November 2013 and to define an appropriate set of input data to be used in TYNDP and for the adapted CBA methodology. After a stakeholder and institution request, the process also offered the opportunity to present case studies illustrating the applicability of the CBA methodology as it became the core of the TYNDP concept.

Even though the consultation process demonstrated stakeholder support, it did not meet ENTSOG's expectations particularly in terms of improving supply data.

Work on the report commenced in summer with the collection of data and a call for projects to be included in TYNDP. As usual, this was a key step since the report's quality depends on the comprehensiveness and accuracy of the input data. This year the obligation for promoters participating in the second selection of Projects of Common Interest to register in TYNDP 2015 reinforced the need for a robust collection process.

The last quarter was dedicated to completing the assessment and editing the report involving full-scale implementation of CBA methodology. The extended time horizon from 10 to 21 years, the inclusion of price information and a second demand scenario dramatically increased the extent of the challenge. To give an idea of the size of this process, TYNDP 2015 is based on more than 100,000 input data and results in more than 25,000 output data in the form of indicators and monetary values.

The report is expected to be published in March 2015 in time to serve as the basis for the second PCI selection.

METHODOLOGY OF COST-BENEFIT ANALYSES

At the end of 2013, ENTSOG published its initial cost-benefit analysis (CBA) methodology for selecting Projects of Common Interest (PCI). In line with Regulation (EC) 347/2013, ENTSOG has adapted a methodology based on the formal opinion of ACER, the European Commission and member states. The final document was submitted in August to the European Commission.

The initial methodology published in November 2013 already contained all the principles necessary to inform the PCI selection process. The adaptation process mainly involved the translation of a high-level document into a practical methodology. It also had to factor in the formal opinions of ACER and European Commission. In this respect, ENTSOG worked in close cooperation with the consultant appointed by European Commission to support its opinion.

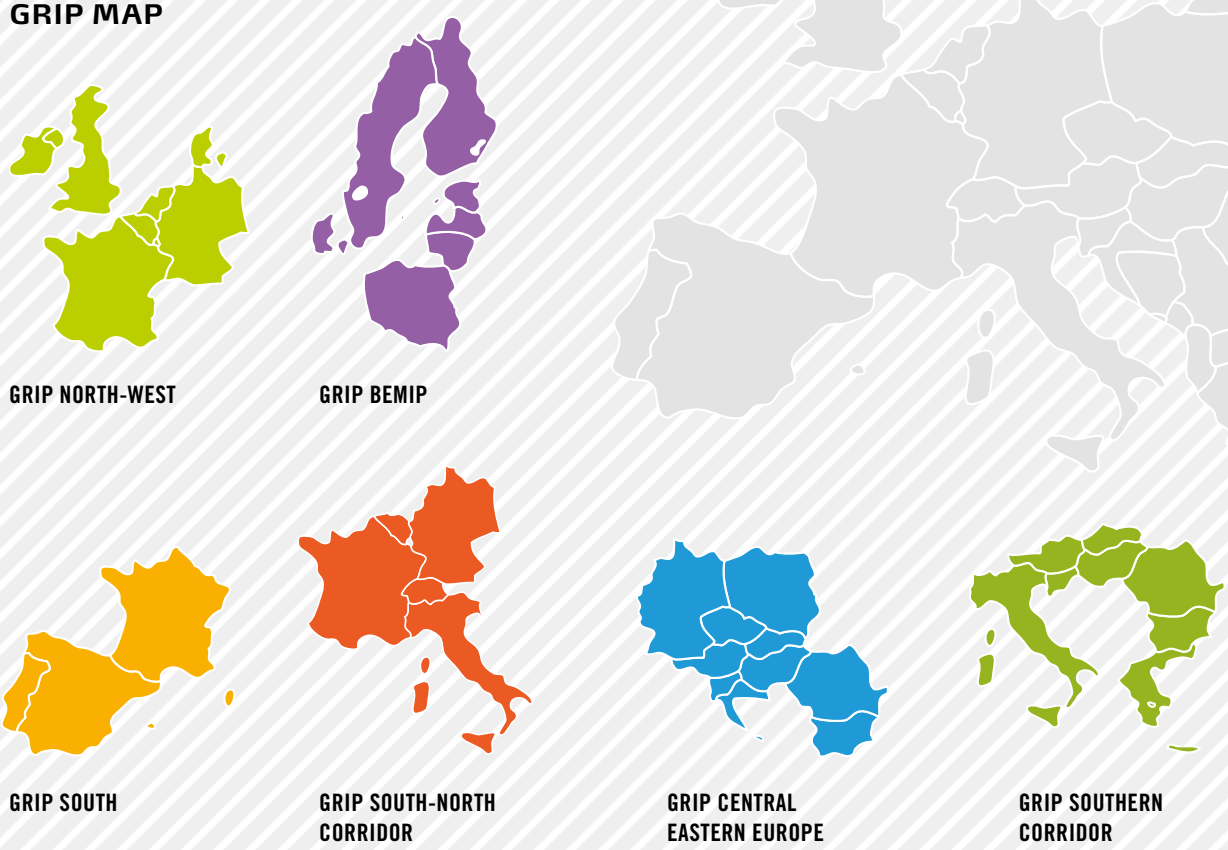
The TYNDP Stakeholder Joint Working Sessions (SJWS) were used to ensure that the adaptation corresponded to market expectations. Here it was proposed to integrate those aspects to be implemented by ENTSOG into TYNDP and separate them from the other components to be carried out by promoters on their own projects. The indicators were expanded to include environmental impact assessments of the projects.

The main concern pertaining to the consultation process was the lack of direction given by institutions and market players on how to define the data related to gas supply and prices. As a result, no major changes were made to the standard definitions proposed by ENTSOG.

The adapted CBA methodology was submitted to the European Commission for approval in August in line with the deadline set by the new TEN-E regulation. In order to facilitate the PCI selection process, ENTSOG published the methodology on its website at this time. The methodology was finally approved by the European Commission in February 2015. This established a legal basis for the selection process and the CBA methodology defined by ENTSOG.

This document also stated that ENTSOG will now offer guidance on the selection process to promoters and institutions, as explained in regional group meetings. Furthermore, ENTSOG has committed to the second selection and, as an interim solution, included modelling as a project-specific step in the CBA methodology. This voluntary initiative should ensure a streamlined and consistent delivery of project assessment.

GRIP MAP



ENTSOG MAPS

In 2014, ENTSOG continued publication of the popular Transmission Capacity Map 2014 and System Development Map 2013, performing the latter in collaboration with GIE.

Both maps benefited from ENTSOG commitment to continuously improving on deliverables. The **Transmission Capacity Map** provides an overview of Europe's main high-pressure transmission lines with information on the technical capacities at cross-border interconnection points. The 2014 edition was printed in June. The **System Development Map** produced in collaboration with Gas Infrastructure Europe focuses on the supply and demand trend of the previous year. It also provides an overview of the existing gas infrastructure and an outlook for its development. The 2014 edition – covering the year 2013 – was published in November.

The current edition of maps can be ordered online: http://maps.entsog.eu

SUPPORT FOR GAS REGIONAL INVESTMENT PLANS

Regional cooperation between TSOs is essential in the gas industry since most of the consumed gas travels across Europe from non-EU supply sources. For this purpose, Gas Regional Investment Plans (GRIPs) are developed by member TSOs under the umbrella of ENTSOG. These help to coordinate activities between neighbouring TSOs and provide financial support for further infrastructural developments wherever necessary. GRIPs serve as a link between TYNDP and national plans.

Publication of the second edition of the GRIP reports commenced in November 2013 with the North-Western region and was completed in August 2014 with the South-North corridor. During this process, ENTSOG supported TSOs through its modelling expertise. Compared to the first edition, each region has contributed with new content based on the feedback received. Regional cooperation within ENTSOG also means that reports further converged in terms of content and layout.

SUPPORT FOR GAS COORDINATION GROUP AND STRESS TEST

The Gas Coordination Group (GCG) is a platform established by Regulation (EU) 944/2010 that introduces measures of safeguarding the security of gas supply. By request from the European Commission, ENTSOG carried out a top-down assessment of stress test scenarios in order to complement member state analyses.

The role of the Gas Coordination Group (GCG) is to exchange information and best practices, and to facilitate Security of Supply (SoS) standards. Members include the European Commission, representatives of EU member states, ENTSOG and other international organisations, as well as industry.

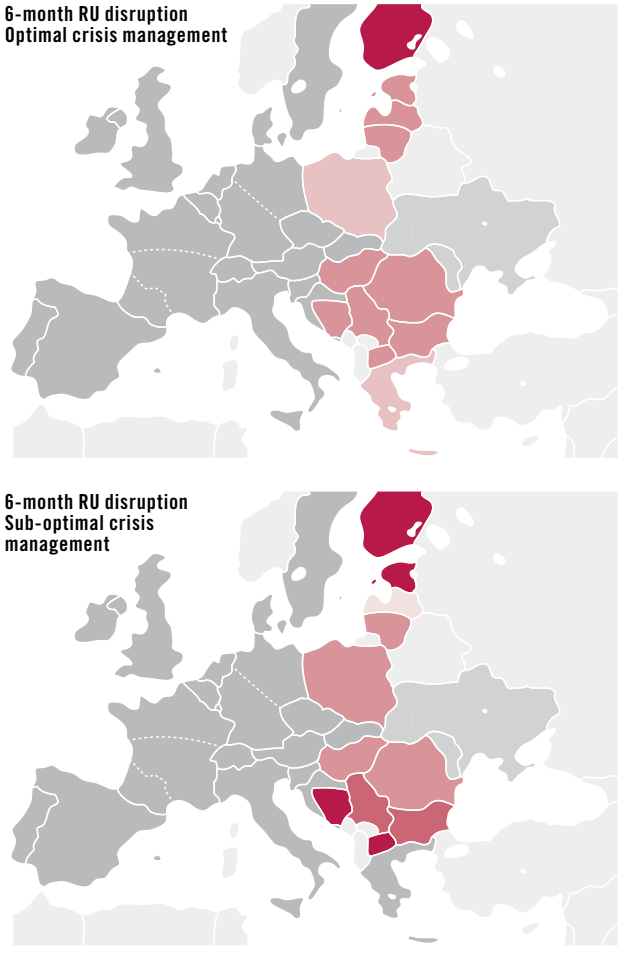
ENTSOG is responsible for coordinating TSO expertise with respect to assessing the interconnected gas infrastructure, especially through modelling analyses. As a part of its regular contributions, ENTSOG published Summer Supply Outlook 2014 and Winter Supply Outlook 2014/15.

The Ukraine crisis has been the core focus of the GCG. In spring 2014, ENTSOG carried out its first simulation based on scenarios defined by European Commission. The results were presented to the Madrid Forum in May and confirmed the strong reliance of the Baltic, Central-Eastern and South-Eastern European regions on receiving Russian gas. It also demonstrated the benefits of large-scale underground gas storage to mitigate potential disruptions in supply. This study was developed and updated late summer on the basis of member stress tests. The results were taken into consideration in the European Commission report submitted to the Council in October 2014.

CRISIS MANAGEMENT BY MARKET & INSTITUTIONS

Definition of 2 modelling approaches
(e. g. 6-month RU disruption)

- **Optimal crisis management**
  - Price-responsive market functioning
  - Perfect cooperation between Member States
  - **> Disruption spread among a maximum of countries in order to reduce relative impact**
- **Sub-optimal crisis management**
  - Price-responsive market functioning
  - Member States export gas only if own demand completely satisfied
  - **> Disruption focused on limited number of countries but with higher relative impact**



RESEARCH AND DEVELOPMENT PLAN

During 2014, many of the ENTSOG AWP deliverables from previous years were concretised. Altogether, this made it possible to implement a methodology for cost-benefit analyses (CBAs). The resulting improvements were also implemented in other deliverables such as the Supply Outlooks.

The Supply and Demand (S&D) and Network Modelling (NeMo) Kernel Groups (KGs) form the core of the Investment Working Group in charge of developing innovative approaches and tools.

Supply and Demand Kernel Group

Here, research is performed to expand knowledge of the supply and demand aspects of European gas. This knowledge is used to develop an improved definition of the assumptions and approaches used in the seasonal outlooks and TYNDP.

On the basis of developments from previous years, the group focused this year on implementing a dynamic definition of gas demand for power generation. This was done by adapting the prognoses from ENTSO-E for each country based on the feedback of gas TSOs. Furthermore, this KG defined rationales to be used by TSOs when defining two demand scenarios on a 21-year time horizon for TYNDP.

Network Modelling Kernel Group

During 2014, ENTSOG improved its modelling approach to also include power generation from gas and coal. Other improvements were developed in the field of temporal optimization benefiting the modelling of supplies and underground storages.

The last project was developing an interface to the modelling tool and a method for running batch simulations since the CBA methodology requires hundreds of simulations.

Data Warehouse

The increasing importance of data management resulted in the development of a centralized data warehouse. This addresses the requirements of the Transparency Platform and the need to process all System Development deliverables.

Considering the growing stakeholder expectations with respect to published data, priority was given to developing the new Transparency Platform launched in October 2014. The remaining efforts were dedicated to processing the massive volumes of data required by the TYNDP and preparing for the project-specific CBA.

COOPERATION WITH ENTSO-E

The assessment of gas demand for power generation has been identified by stakeholders as one of the main aspects to be improved in TYNDP 2015. Therefore both ENTSOG and ENTSO-E have reinforced their collaborative efforts.

The development of methodologies of assessing gas demand for power generation and a CBA was made possible through the close cooperation between ENTSOG and ENTSO-E. This involved the development of hypotheses on the possible evolution of the energy mix produced by each European country.

By the end of the year, both ENTSO-E and ENTSOG decided to establish their first common task force (Cogasel TF). The objective of this was to increase synergies in developing their respective TYNDPs and to prepare a joint modelling approach by the end of 2016 as required by the new TEN-E regulation.

System Operation Area

The System Operation department at ENTSOG is primarily responsible for the development of technical network codes and the operation and well-functioning of the Transparency Platform and currently consists of two main working groups: Interoperability (INT WG) and Transparency (TRA WG). System Operation is also in charge of the technical operation with Third Country-TSOs and the development of an Early-Warning-System (EWS) to manage a security of supply crises.

The main deliverables are the finalisation of the comitology phase of the Interoperability and Data Exchange Rules network node, a new version of the Transparency Platform, establishing an EWS through the creation of the Early Warning Team East and the proof of concept for the Data Exchange Protocol – AS4.

AREA STRUCTURE

The Transparency Working Group (TRA WG) is responsible for publishing and reporting technical information from ENTSOG's members pertaining to transparency guidelines and REMIT. INT WG is in charge of issues such as gas quality, common network operation tools, Interconnection Agreements and Business Rules.

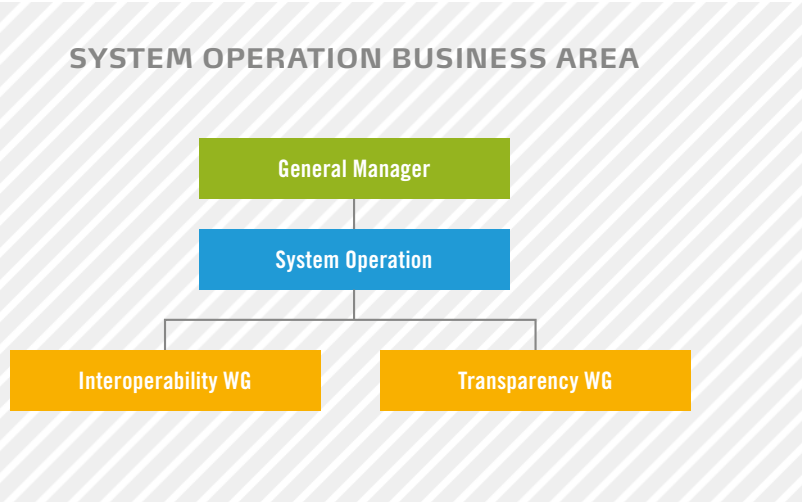
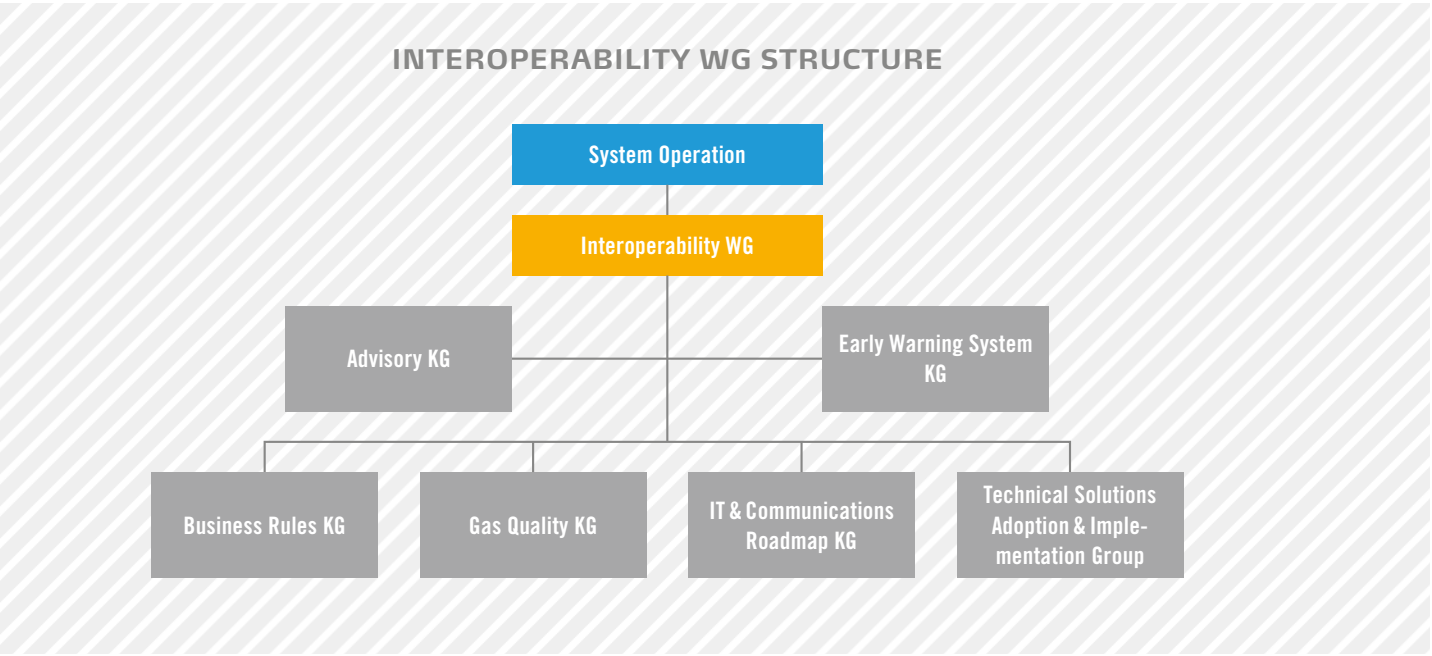



Image courtesy of Open Grid Europe



INTEROPERABILITY

Group Structure

INT WG is supported by the following Kernel Groups (KGs):

- **Advisory KG**, responsible for coordinating processes relevant to the development and delivery of the Network Code on Interoperability and Data Exchange Rules
- **Business Rules KG**, responsible for development of harmonised rules related to technical cooperation between TSOs, including interconnection agreements
- **Gas Quality KG**, responsible for issues related to quality specifications and odourisation practises
- **IT & Communications KG**, responsible for issues related to streamlining communication solutions for data exchange
- **Technical Solutions Adoption & Implementation Group**, responsible for developing the common tools for data exchange needed to implement network codes
- **Early Warning System KG**, responsible for the development and implementation of an Early Warning System to manage Europe-wide crises in security of gas supply at short notice

Finalisation of the Network Code for Interoperability and Data Exchange Rules for Comitology

On the 21 November 2013, ENTSOG received ACER's "Reasoned Opinion" on the network code draft for Interoperability and Data Exchange (INT NC). ACER acknowledged a high degree of compliance but highlighted some areas where the drafted network code deviated from the Framework Guidelines. Where required, adjustments were made and clarifications proposed with the aim of complying with the Framework Guidelines and Regulation (EC) 715/2009. On 18 December 2013, ENTSOG re-submitted INT NC to ACER.

Based on the re-submitted version of INT NC, ACER sent its recommendation to the European Commission (EC) on 15 January 2014. ACER stated that the document satisfactorily reflected most of the amendments proposed in their Reasoned Opinion, and included the revisions and clarifications requested by the EC. The Impact Assessment of INT NC was approved by the EC in January 2014

From January to June 2014, several trilateral meetings with ACER and the EC were held to prepare the INT NC for the comitology process. Focal points in the discussion were gas quality – particularly odourisation practices – and data exchange. Another important modification to INT NC was that ENTSOG was now to develop and publish an interconnection agreement template covering the default terms and conditions.

EC commenced the translation phase of the INT NC draft for comitology on 10 June 2014.

Follow-up Activities

In close cooperation with INT WG, the System Operations department at ENTSOG continued to assist ACER and the EC until INT NC passed through comitology. During preparations for the comitology process, ENTSOG provided advice and support to the participating parties. This consisted of holding additional trilateral meetings and acting as a consultant to the formal Gas Committee sessions.

The first comitology meeting was held from 10–11 July. The main topics discussed by the member states and European Commission were:

- Scope of the code, which generally focuses on interconnection points but also addresses virtual trading points and hub operators in terms of data exchange
- The use of a lesser rule in the matching process that could be a contradiction to the restrictions of nomination rights when 'use-it-or-lose-it' (UIOLI) congestion management is applied
- Plans to draft an Interconnection Agreement template in 2015
- Possible adoption of CEN units (MJ, kPa, K) and reference conditions (15°C/15°C).
- Odourisation chapter, which required some changes in timing, rules, impact assessment and share of the costs after failing to be approved by the member states.
- Refinement of data exchange chapters

The network code was approved by the Gas Committee during the second comitology meeting, which was held from 3–4 November.

The main changes to the initially submitted version of INT NC were:

- An additional task assigned to ENTSOG was to develop and publish an Interconnection Agreement Template on the ENTSOG website taking into account ACER's reasoned opinion, due by the end of 2015
- Monitoring of implementation is now mentioned in recital and in a dedicated article that sets specific deadlines. ENTSOG is to receive the mandatory terms of Interconnection Agreements concluded or amended after INT NC is applicable (May 2016).
- Matching process was amended to make CMP rules prevail over the lesser rule
- The Units chapter gives an exemption allowing other reference conditions where one member state is connected to only one other member state, and where the parties and National Authorities agree
- Long term gas quality monitoring to be published together with TYNDP. This has to be delivered for the first time in 2017
- If parties fail to agree on odourisation practises within six months and also fail to define a suitable plan for a cost-effective solution within the following twelve months, non-odourised gas will apply within four years. Once the technical realisation of non-odourised gas is complete, TSOs shall accept reducing residual amounts of odourants in cross-border flows where necessary.
- Data exchange rules apply to network users active at interconnection points or virtual trading points as well as to REMIT.

Image courtesy of GRTgaz

Image courtesy of Snam Rete Gas

In summary, the approved version of INT NC:

- Makes Interconnection Agreements mandatory for each interconnection point, with specific mandatory terms that facilitate the efficient operation of interconnected networks, as required for a Europe-wide integrated gas market.
- Assigns ENTSOG with the task of drafting an Interconnection Agreement template that covers the default rules for the mandatory terms.
- Establishes a common set of units, for communication and data exchange purposes.
- Defines a process to:
  - Overcome possible cross-border trade restrictions due to gas quality issues
  - Offer information to consumers on short-term variations on quality parameters
  - Monitor long-term gas quality changes
- Establishes procedures for managing possible cross-border trade restrictions due to differences in odourisation practices
- Defines harmonised communication solutions for necessary data exchange and a transparent process for the development of common network operation tools including public consultations in line with Article 8 Regulation (EC) 715/2009

After the second comitology meeting, INT NC was subject to a three-month scrutiny period. INT NC is foreseen to come into force in May 2015 and shall apply from 1 May 2016.

If we were by magic to switch overnight all of the world's coal-fired power plants to modern natural gas fired combined cycle plants we would experience a reduction of over 5 GT CO_2/year in global emissions, 15% of the current total

Follow-up Processes for Gas Quality Standardisation

Differences in gas quality specifications between different countries could be a barrier to the free flow of gas in the internal market. Therefore, the idea of harmonising specifications has been widely explored by different groups in the recent years. ENTSOG, utilising the experience of its members, is taking an active role in this area including participation in work groups.

ENTSOG has acted on and actively contributed to the gas quality standardisation work performed by CEN in their mandate M/400 (standardisation of gas quality) and M/475 (standard for biomethane). The System Operations department also oversaw comments submitted from TSOs to the standards committee. ENTSOG pursued the convergence of these standards to the criteria set out in the draft version of the network code, with a special focus on units and odourisation practices.

ENTSOG also participated in the coordination group of the pilot project for the harmonisation of EU gas quality, led by EASEE-gas and Marcogaz.

Image courtesy of Gasum

Recommended International TSO Cooperations

According to Regulation (EC) 715/2009, ENTSOG must adopt recommendations relating to the coordination of technical cooperations between member states and third-country TSOs. In a meeting held at the premises of the Secretariat in Vienna on the 1 October 2014, ENTSOG and the Energy Community Secretariat have agreed to continue the mutually beneficial cooperation commenced in 2013. It was agreed to have a working level meeting in the first half of 2015. The aim is to assist the contracting parties to the Energy Community in adopting the business rules resulting from the NCs.

In addition, it was agreed to engage with third-country TSOs to develop an Early Warning System (EWS) particularly in light of the ongoing Ukraine crisis. Therefore, the Energy Community added the EWS to the agenda of the Security of Supply (SoS) Coordination Group Meeting.

The third meeting of the GAS Sub Group was held in Ljubljana, Slovenia on 7 October 2014. Participants at this meeting found it highly engaging and asked ENTSOG to further involve the Third Countries in the development of the EWS. ENTSOG welcomed this and promised to take further actions in strengthening the cooperation with Third Countries, in line with Annex IV of Regulation (EU) 994/2010 (see also next point).

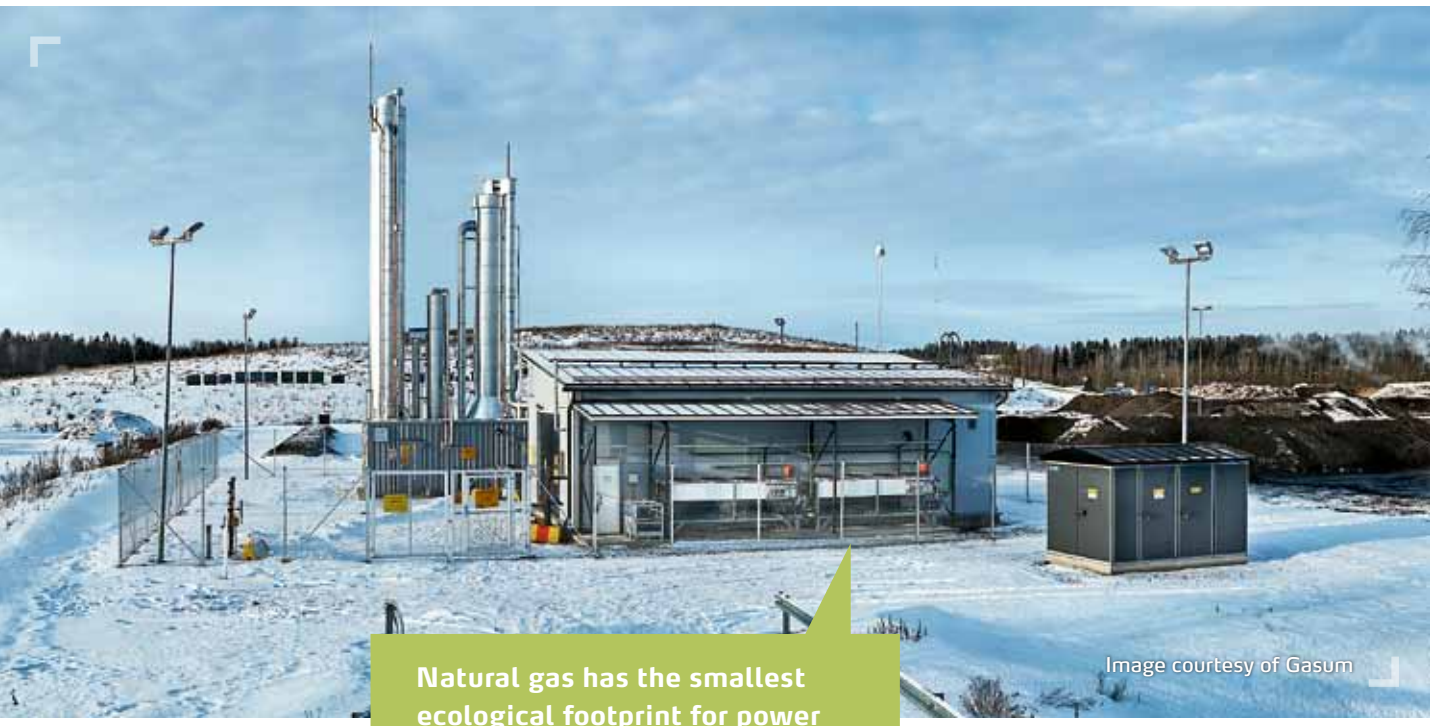


Image courtesy of Gasum

Natural gas has the smallest ecological footprint for power generation compared to other carbon fuels.

Early Warning System (EWS)

In the framework of the EU-Russia dialogue, ENTSOG launched development efforts for an EWS in 2013. Discussions on this system continued into 2014 and the first milestone reached was the implementation of an EWS with the Early Warning Team East in place by 1 October 2014. This team consists of 16 TSOs including Ukrainian TSO Ukrtransgaz. Once in place, EWS serves as a forum where TSOs can provide their expertise and information to other TSOs or to other stakeholders. This can be done on short notice to overcome or at least mitigate the consequences of a security of supply (SoS) crisis. With the development of the EWS under the umbrella of ENTSOG, member state TSOs demonstrated their willingness to assume responsibility for European-wide cooperative efforts in compliance with Regulation (EU) 994/2010.

Support in Establishing Ukrainian Monitoring Mission

In accordance with Regulation (EU) 994/2010 Article 11 Para. 7 and the "Rules of procedure for the Gas Coordination Group" Article 5 and 6, the EC formally asked ENTSOG for their support in establishing a Ukrainian Monitoring Mission.

ENTSOG indicated its willingness to cooperate closely with the EC and several talks were scheduled to define the ToR for the mission, the scope of work, and which information should be exchanged for effective monitoring. Furthermore, the EC asked for three representatives to visit the Ukrtransgaz headquarters, if necessary, and who could be contacted in the event of a security of supply (SoS) crisis. The first high-level visit by one of the three representatives was organised with the aim of building confidence and evaluating which data could be exchanged. The visit took place on the 22 December 2014 and the outcome was highly positive. Additional visits are envisaged for the future.

Common Network Operation Tools

The purpose of the Common Network Operation Tools is to define Business Requirements Specifications and Message Implementation Guidelines for business processes developed under Regulation (EC) No 715/2009 and to support other working groups (CAM, Balancing) in developing these common tools.

Implementation Rules for Common Data Exchange Protocol

In 2013, ENTSOG's ITC KG defined the usage profile of document-based data exchange for AS4. From March until August 2014, a proof-of-concept (PoC) was performed by six parties: four TSOs and two network users. The results of the PoC were presented at a workshop on 9 September 2014 where all market participants, solution providers, regulators and other industry sectors (IATA) participated. Wherever necessary, the AS4 usage profile document was adapted in compliance with the PoC results.

Local Issuing Office for EIC scheme

ENTSOG operates a local issuing office (LIO) for Energy Identification Codes (EICs) for the international gas market since March 2013. Since that date more than 350 codes have been issued for interconnection points, parties and gas installations such as storage facilities and LNG terminal plants. The System Operations department administers, validates and publishes EICs in close cooperation with ENTSO-E.

To improve LIO services, ENTSOG began by defining specifications for an EIC management tool. The goal of this tool is to eliminate the impact of human error and thus make the LIO office more efficient and effective. Interested members who operate a LIO will be able to use this tool by May–June 2015.

In 2014, ENTSOG participated in a task force for reviewing and adapting the EIC reference manual. This manual contains the rules and procedures for allocating EICs in compliance with additional requirements imposed by REMIT for the identification of market participants. The revised procedures will be implemented during 2015.

Support for other groups

TSAIG, BR KG and INT WG supported BAL WG and CAM WG in their development of business requirement specifications documents for Common Network Operation Tools (CNOTs). Once created, these will help TSOs and other market players to implement the respective network codes. The final business requirement specifications for BAL and CAM NCs were presented on 25 February 2014.

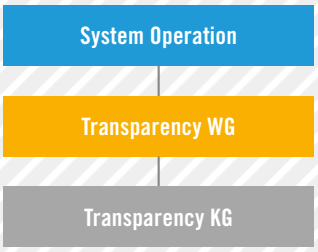
TRANSPARENCY

The liberalisation process aimed at the creation of an internal gas market has significantly changed the gas transmission business and increased the need for transparency. In this respect specific obligations for TSOs have been introduced through Regulation (EC) 715/2009, which defines the basic transparency rules that are further specified in Chapter 3 of Annex I (and its amendments). Since network codes were developed with the aim of market integration, additional information relating to the access and operation of gas networks must be made publicly available.

Group Structure

The Transparency Workgroup (TRA WG) is assisted by the Platform Development KG, which is responsible for analysing transparency requirements (REMIT, CMP and TARIFF) and proposing improvements to the Transparency Platform

TRANSPARENCY WG STRUCTURE



New ENTSOG Transparency Platform

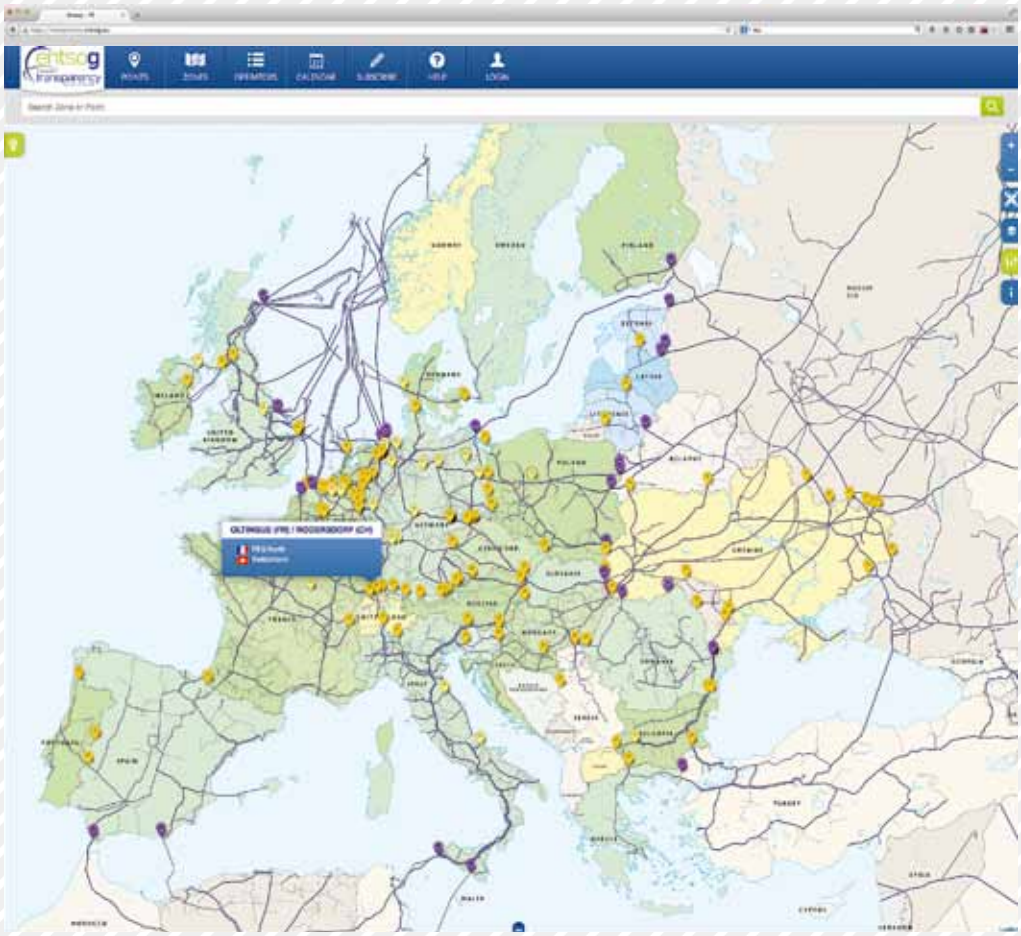
Even though information has been made available by individual TSOs, network users may still face difficulties transporting gas across Europe due to differences in market models across the continent. The ENTSOG Transparency Platform has therefore been designed to facilitate access to transmission networks by, among other things, making all the information available in an organized and structured manner on a single website.

The new Transparency Platform provides technical and commercial data pertaining to gas transmission/storage, LNG, gas distribution, final consumers and production, and displays the relevant points in a new map. The platform is free of charge for use by all market participants. All information provided by TSOs is marked with time stamps. Uploads can be made on an hourly basis but this also depends on local requirements and technical factors.

Some other tools that are available include graphs and charts for more convenient display of data and a balancing zone map with more details on gas flows between Europe's balancing zones.

Advanced tools allow users to perform point-by-point searches by entering the first letters of each point, country, TSO etc. The following information is available (historical/future availabilities):

- Capacities (per type and availability status);
- Balancing model and charges;
- Tariffs;
- Nominations and physical flows;
- Interruptions;
- Types of contracts offered;
- Gas quality data;
- CMP related data (unsuccessful requests, cleared and reserved prices, unavailable firm capacities and capacities made available).



There are now two different methods available for downloading data. For human users, the Export Wizard integrated into the platform allows them to easily choose the type of data to download. Machine users—such as external IT systems connected to the ENTSOG Transparency Platform—can perform automatic queries to retrieve data from the Transparency Platform using specific functionality (API) that bypasses the GUI and offers a wide range of filters.

All these tools and data are available to any user on a subscription-free basis. For frequent users, ENTSOG offers a subscription-based 'favourites' service that is even faster and more effective.

The new Transparency Platform also allows TSOs to publish urgent market messages in compliance with REMIT.

https://transparency.entsog.eu

Regulation of Energy Market Integrity and Transparency

The Regulation on Energy Market Integrity and Transparency (REMIT) pertains to all European players in the in the wholesale energy markets (according to Regulation) and has direct consequences for TSOs and ENTSOG. REMIT has always been on the agenda at Transparency Working Group (TRA WG) meetings. The Regulation (EC) No 1227/2011 was published on 25 October 2011.

REMIT is founded on 3 pillars:

1. **Fairness:** Market players are prohibited from abusing the system through insider trading, misleading transactions, price positioning, transactions involving deception/fictions devices and dissemination of false information.

2. **Monitoring:** A transaction and data reporting framework has been established that allows ACER to monitor the entire EU wholesale energy markets. Market participants are required to provide records of transactions, including orders to trade, without double reporting.

3. **Enforcement:** If market monitoring indicates potential market abuse, the incidents are investigated and action is taken. National regulatory authorities are responsible for ensuring that REMIT is enforced.

The Implementing Acts, issued by the European Commission and published in December 2014, establish rules prohibiting abusive practices affecting the wholesale energy market. This document clarifies what information market participants are to report to ACER in order to enable the Agency to fulfil its monitoring responsibility.

The key activities performed by TRA WG can be summarized as follows:

- Hold workshops with ACER and European Commission to clarify legislation and propose implementation solutions for data provision
- Participate in public consultations and workshops organised by European Commission and ACER
- Participate in REMIT IT Expert Meetings
- Participate in pilot project for uploading data to REMIT database at ACER
- Refine text, table structure for data provision and taxonomy for draft implementing acts proposed to European Commission and ACER
- Develop structure of Urgent Market Messages and implement them on the new Transparency Platform.

Image courtesy of Ontras Gastransport

Transparency Workshop

ENTSOG's 8th Transparency Workshop was held successfully on 11 December 2014. Participants from all sectors of the gas industry had the chance to learn about and discuss topics such as:

- Features and functionalities of new Transparency Platform
- TSO experiences made while implementing new Transparency Platform
- ACER, NRAs and EFET views on new Transparency Platform
- REMIT implementing acts and data to be reported by TSOs
- Framework Guidelines on tariffs and new transparency requirements

EFET, ACER and NRAs have all acknowledged the significant work put into the new Transparency Platform by TSOs and ENTSOG and have encouraged ENTSOG to continue this work. REMIT has garnered public attention through the immediate publication of the REMIT Implementing Acts. Stakeholders have received answers on double data reporting, data transmission responsibilities and data transmission through third parties. The tariff discussion held at the end of the workshop informed stakeholders on which tariff data will be published and where it can be found (ENTSOG Transparency Platform or TSO websites).

Implementation and Monitoring of New Regulations

The following sections describe how the network codes and guidelines are implemented and monitored in addition to the implementation of additional relevant EU Regulations.

MONITORING THE CMP NETWORK CODE

As stipulated by article 8 (8) of the Gas Regulation, ENTSOG monitors the implementation of the Congestion Management Procedures (CMP). CMP was developed by the European Commission from 2010–2011, approved by the EU Gas Committee on 24 August 2012, and implemented on 1 October 2013.

ENTSOG launched the monitoring process in November 2014 to ensure the timely publication of results in Annual Report 2014. Since ACER's detailed CMP implementation monitoring report was already published in January 2015, ENTSOG chose a less complex method of self-assessment for Transmission System Operators (TSOs). The aggregated results are shown below.

Overview of Implementation status

NUMBER OF TSOs	ADDITIONAL CAPACITY BY CMP MEASURES	OVERSUBSCRIPTION AND BUY-BACK SCHEME OR FIRM DAY-AHEAD UIOLI MECHANISM[1]	SURRENDER OF CONTRACTED CAPACITY	LONG-TERM UIOLI	COMMENTS
29					Including exemption as per NRA decision under point 2.2.3(6)[1]
1					LT UIOLI: delayed implementation in accordance with NRA
1					OS+BB: The NRA has not approved the proposed scheme yet
3					OS+BB: implementation in 2015
1					OS+BB + SoC: implementation in 2015
1					OS+BB + LT UIOLI: implementation in 2015
3					OS+BB + SoC + LT UIOLI: implementation in 2015
8					

Implemented
In process of implementation (NRA decision pending)
Not applicable, as regards scope, implementation date or derogation under Article 49 of Gas Directive
Not implemented

1) The firm day-ahead UIOLI mechanism should be implemented by 1 July 2016, where ACER's congestion monitoring report shows that there is excessive demand for firm capacity products offered in the next three years or where no firm capacity is offered at all

An internal survey conducted by ENTSOG (44 ENTSOG members and three associated partners) regarding the implementation of the CMP measurements shows that 29 of 47 European TSOs have already implemented all four CMP measures. Five other TSOs have implemented three of the four measures. Furthermore, five other TSOs intend to implement one or more of the CMP mechanisms during 2015. Eight TSOs[1)] are exempted from CMP guidelines since they belong to member states that have been granted derogation under Article 49 of the Gas Directive by European Commission or since they still do not have CAM/CMP-applicable interconnection points (IPs).

1) Estonia, Finland, Latvia, Lithuania, Luxembourg and Sweden have been granted derogation. One TSO in Italy and one TSO in Spain do not have CAM/CMP applicable IPs.

Image courtesy of REN Gasodutos

Natural gas is easier and more affordable to store than electricity.

Conclusions

29 TSOs have fully implemented the CMP Guidelines. Ten TSOs are still in the process of implementing some of the CMP mechanisms or awaiting NRA approval.

The delays with some TSOs can be explained by their relevant implementation plans or due to not yet having received approval for the implementation proposal from their NRA. Infrastructure operators who have been granted 'TSO' status subsequent to the mandatory implementation deadline may not yet have duly implemented the CMP measures. In these latter cases, TSOs have agreed to a suitable implementation scheme with their NRA.

In cases where TSOs have not yet fully implemented all of the proposals for CMP mechanisms, they are nonetheless working towards full compliance. On the other hand, some of the TSOs for whom implementation of CMP was not compulsory have nonetheless chosen to apply the guidelines.

Of all the foreseen CMP measures, it is not possible to simultaneously implement both the oversubscription/buy-back scheme and firm day-ahead use-it-or-lose-it (UIOLI) mechanisms. Despite the fact that these two methods are partially incompatible, this does not necessarily limit the ability to offer additional capacity. By applying gas flow stabilising measures, TSOs can store previously sold capacities by implementing the oversubscription/buy-back scheme and firm day-ahead UIOLI mechanism at just one side of an interconnection point.

However, the practical application of CMPs by shippers is limited. This is mainly due to the fact that there is no contractual congestion at a significant number of interconnection points. Roughly one-third of the TSOs stated that there is no contractual congestion at their interconnection point (IP). This also means that although the CMP measures have not been fully implemented in all EU countries this has only had limited practical implications on the market.

MONITORING THE CAPACITY ALLOCATION MECHANISMS NETWORK CODE (CAM NC)

CAM NC was developed by ENTSOG and is based on the Framework Guidelines given in the Capacity Allocation Mechanisms from ACER 2011–2012.

CAM NC was approved by the EU Gas Committee on 14 October 2013 as Commission Regulation (EU) No 984/2013.

The implementation date of CAM NC is 1 November 2015 with the exception of Article 6, which is to be implemented by 4 February 2015.

Monitoring Article 6 of CAM NC

The aim of Article 6 is to increase the amount of bundled capacity made available to network users at interconnection points (IPs). This is achieved by maximising the technical capacity while accounting for system integrity, safety and efficient network operation. To achieve this objective, adjacent TSOs shall develop a joint mechanism that describes the specific actions to be taken. Priority shall be given to IPs where contractual congestions can be identified.

According to Article 19 of CAM NC, TSOs shall primarily offer bundled capacity products to the market. This obligation enters into force on 1 November, 2015. The commitments for TSOs resulting from Article 6 can be seen as preparatory tasks in order to achieve the highest bundling of capacity possible.

Pursuant to Article 8 (8) of Regulation (EC) No 715/2009, ENTSOG monitors the implementation of CAM NC. ENTSOG launched the monitoring process in December 2014 to ensure timely publication of results in Annual Report 2014.

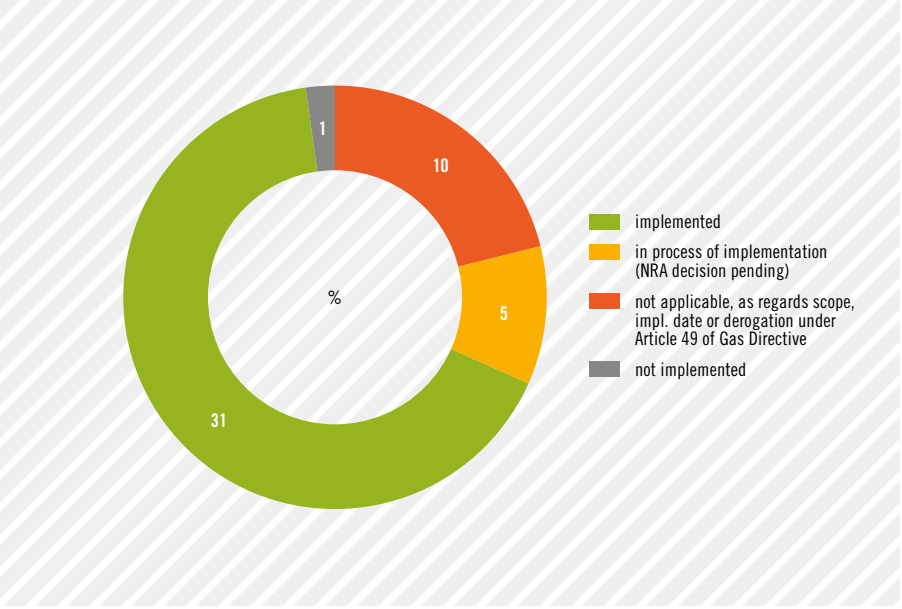
The aggregated results are shown below.

Overview of Implementation status

NUMBER OF TSOS	METHOD FOR MAXIMISING TECHNICAL CAPACITY DEVELOPED	IN-DEPTH ANALYSIS OF TECHNICAL CAPACITIES ON BOTH SIDES OF AN IP CARRIED OUT	FREQUENCY FOR DYNAMIC RECALCULATION OF TECHNICAL CAPACITY SET	ASSESSMENT OF PARAMETERS AS DEFINED IN ART. 6, 1(B) CAM NC MADE	COMMENTS
31					
4					ongoing discussion with adjacent TSOs regarding method + its application
1					agreeing on joint method with adjacent TSOs, but application presumably not before Nov 1, 2015
1					Elaboration of the methodology which shall be applied
10					exempted

Implemented
In process of implementation (NRA decision pending)
Not applicable, as regards scope, impl. date or derogation under Article 49 of Gas Directive
Not implemented

The survey conducted by ENTSOG indicates that 31 of 47 TSOs (44 ENTSOG members and 3 associated partners) in EU have applied the measures of Article 6 to maximise technical capacity. Furthermore, six TSOs are currently implementing or at least developing a joint mechanism to be applied. Ten TSOs are exempt from the Article 6 requirements since their member states have been granted derogation under Article 49 of the Gas Directive.



The diagram indicates that 84% (31 of 37 TSOs) of the TSOs, whose member states have not been granted derogation under Article 49 of Gas Directive, have already implemented Article 6 of CAM NC and that over 13% (5 of 37 TSOs) of these TSOs are currently in the midst of implementation.

Conclusions

31 European TSOs have already complied with the requirements defined in Article 6 Regulation (EU) 984/2013. This means that they have jointly developed and applied a method with neighbouring TSOs at their interconnection points (IPs).

At a few IPs, neighbouring TSOs are still developing a joint method of capacity allocation management. Six TSOs are currently working on the application of Article 6 Reg. 984/2013. Five of these six TSOs have already developed a methodology. Four of them are currently in discussion with (nearly) all adjacent TSOs at their IPs in order to agree on a methodology and/or application. One of the five TSOs is still preparing a joint approach to increasing capacities, since capacity bundling at cross-border points will presumably not be applied before 1 November 2015. This is due to the fact that bundling is not currently covered in its national regulations.

One TSO is currently developing an approach for a joint method to increase bundled capacity at IPs.

REPORT ON THE IMPLEMENTATION OF BALANCING NETWORK CODE (BAL NC)

Regulation (EU) 312/2014 from 26 March 2014 foresaw a Gas Balancing Network Code (BAL NC) for transmission networks that entered into force on 16 April 2014. BAL NC comes into effect on 1 October 2015 and will allow TSOs to apply for an extension until 1 October 2016. In cases of insufficient liquidity in the short-term gas wholesale market, BAL NC also allows TSOs to apply for interim measures up to five years subsequent to BAL NC coming into effect.

At the XXV Madrid Forum on 6–7 May 2014, ENTSOG and ACER were asked to assess the implementation status of BAL NC in member states and to present their findings at the following Forum. In particular, ENTSOG and ACER were asked to focus on the planned application of interim measures by individual TSOs. To meet this request, ENTSOG and ACER presented a joint report on the early implementation of the BAL NC at the XXVI Madrid Forum and published it on 22 October 2014 on their respective websites.

The report reflects the individual implementation practices of respective TSOs and NRAs, including timetables for when provisions of the BAL NC are to be met. It shows that interim measures are planned for seven of the 22 responding member states, primarily in Central and Eastern Europe. Nine TSOs plan to be fully compliant with the provisions of the BAL NC by 1 October 2015 and six TSOs intend to apply for deadline extension no later than 1 October 2016.

The main finding of the report is that TSOs and NRAs are progressing with implementation, despite the low market liquidity in some countries. These latter TSOs require more time to create a functioning wholesale market that will allow both network users and TSOs to balance capacities in a manner appropriate for the market. In addition to this, it was noted that some TSOs still require major IT investments in order to be able to meet the requirements of CAM NC.

The report presented at the XXVI Madrid Forum highlighted the importance of a complete, coordinated and consistent implementation of BAL NC.

The Forum urged ENTSOG and ACER to continue to follow up the implementation by addressing potential issues, promoting the exchange of best practices at national level and supporting cross-border cooperation in the relevant areas.

TRANSPARENCY PLATFORM

The Transparency Working Group (TRA WG) at ENTSOG holds monthly meetings for its members. With the previous Transparency Platform in place since 2009 and refurbished by ENTSOG in 2012/13, TRA WG was entrusted with launching a new Transparency Platform that made use of the state-of-the-art IT technologies. This new Transparency Platform went live on 1 October 2014 and accounted for ACER Opinion 20/2013 as well market requirements collected during the Transparency Workshop. Some of the new features in the Transparency Platform are the ability to publish hourly values, timestamp published data and visualise data in charts and graphs. Furthermore, the published format of the technical information has been completely harmonized.

REMIT ENFORCEMENT

Another important activity carried out by TRA WG is enforcing REMIT (Regulation (EU) 1227/2011). REMIT establishes market rules in order to prevent abusive practices that would have a detrimental effect. On the basis of Article 8 in REMIT, the EC has a) drawn up a list with contracts and derivatives, including orders to trade, to be reported to ACER, b) adopted uniform reporting rules, c) specified the timing and format for reporting.

TRA WG has cooperated closely with EC and ACER in specifying how to submit REMIT data to ACER for gas market monitoring and defining data exchange standards.

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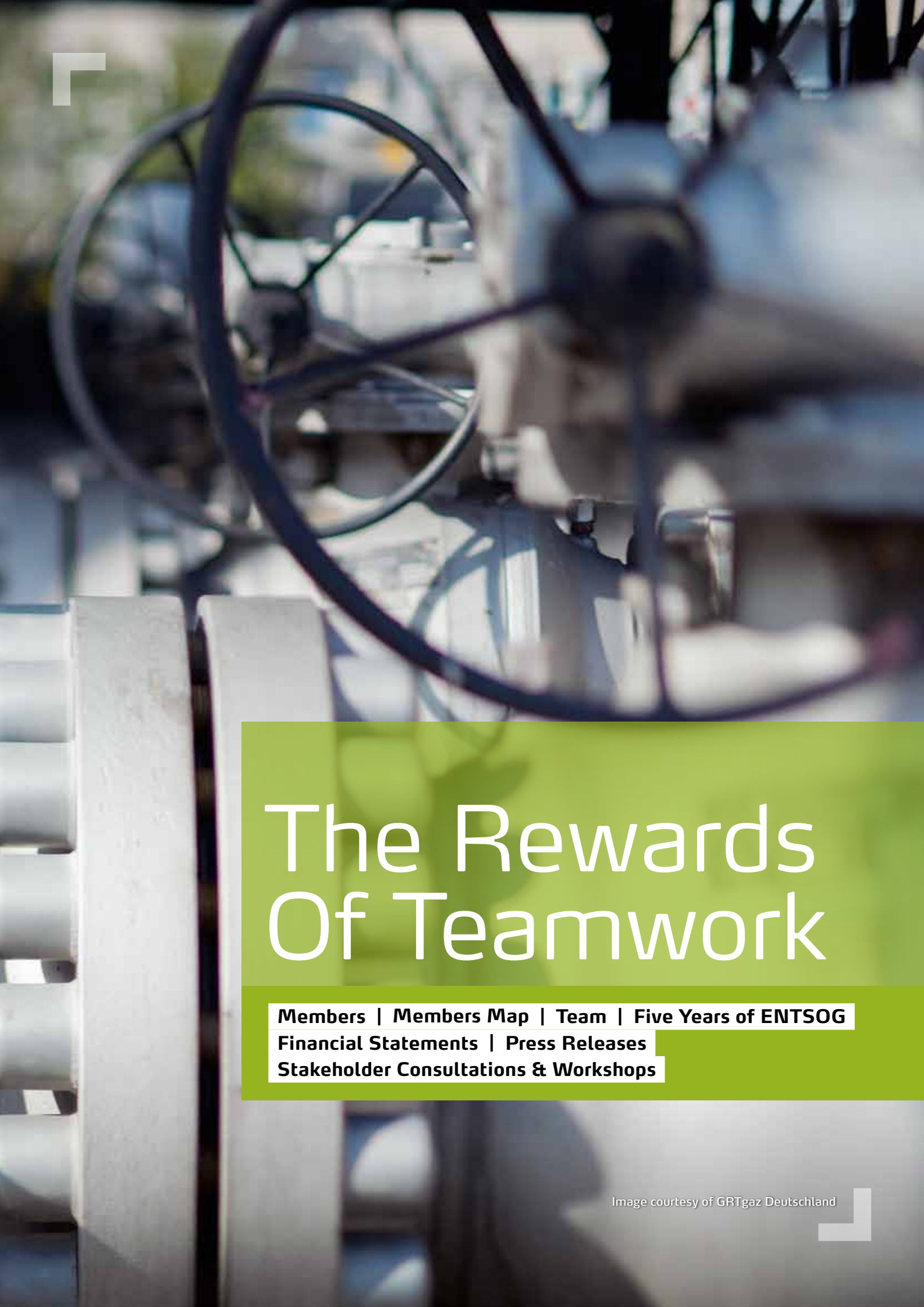


The Rewards Of Teamwork

Members | Members Map | Team | Five Years of ENTSOG
Financial Statements | Press Releases
Stakeholder Consultations & Workshops

Image courtesy of GRTgaz Deutschland

ENTSOG Members

STATUS: END OF 2014

ENTSOG currently consists of 44 members, three associated partners from 26 EU countries and four observers from non-EU countries.

MEMBERS (44)

Austria	– Gas Connect Austria – Trans Austria Gasleitungsgesellschaft
Belgium	– Fluxys Belgium
Bulgaria	– Bulgartransgaz
Croatia	– Plinacro
Czech Republic	– NET4GAS
Denmark	– Energinet.dk
Finland	– Gasum Oy
France	– GRTgaz – TIGF
Germany	– bayernets – Fluxys TENP – GASCADE Gastransport – Gastransport Nord – Gasunie Deutschland Transport Services – Gasunie Ostseeanbindungsleitung – GRTgaz Deutschland Transport Services – Jordgas Transport – NEL Gastransport – Nowega – Ontras Gastransport – Open Grid Europe – terranets bw – Thyssengas
Greece	– DESFA
Hungary	– FGSZ Natural Gas Transmission
Ireland	– Gaslink Independent System Operator
Italy	– Infrastrutture Trasporto Gas – Snam Rete Gas
Luxembourg	– Creos Luxembourg
Netherlands	– bbl company – Gasunie Transport Services
Poland	– Gas Transmission Operator GAZ-SYSTEM
Portugal	– REN-Gasodutos
Romania	– Transgaz
Slovak Republic	– eustream
Slovenia	– Plinovodi
Spain	– Enagás – Reganosa
Sweden	– Swedegas
United Kingdom	– BGE UK – Interconnector (UK) – National Grid Gas – Premier Transmission

ASSOCIATED PARTNERS (3)

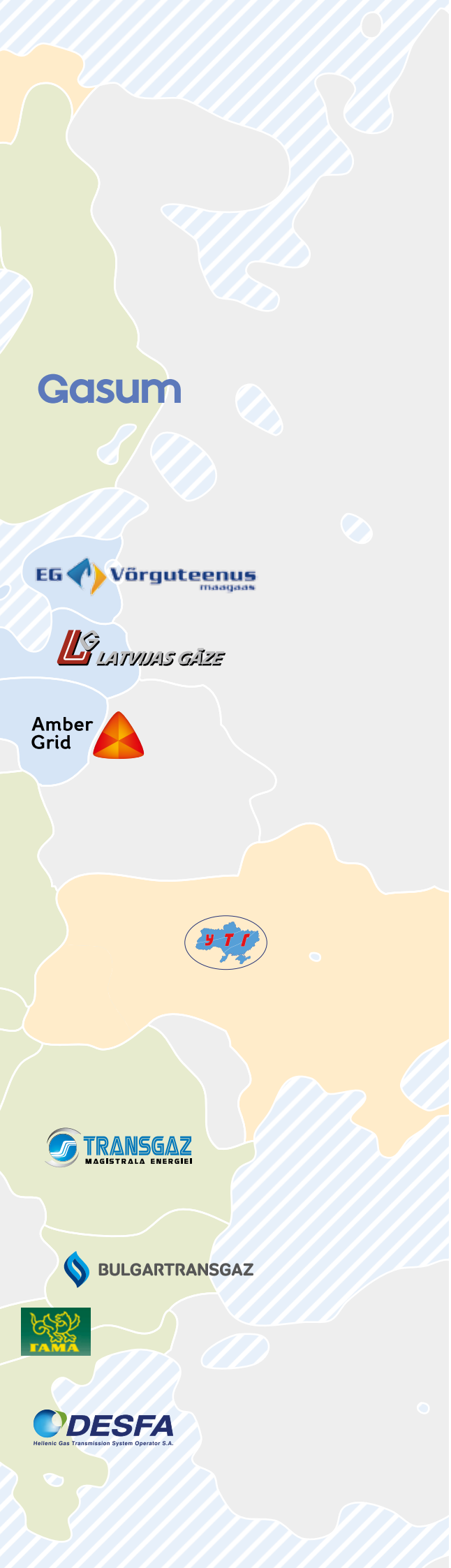
Estonia	– EG Võrguteenus
Latvia	– Latvijas Gāze
Lithuania	– Amber Grid

OBSERVERS (4)

F.Y.R.O.M.	– GA-MA AD Skopje
Norway	– Gassco
Switzerland	– Swissgas
Ukraine	– UKRTRANSGAZ

Members Map

STATUS: END OF 2014



AUSTRIA AND GERMANY

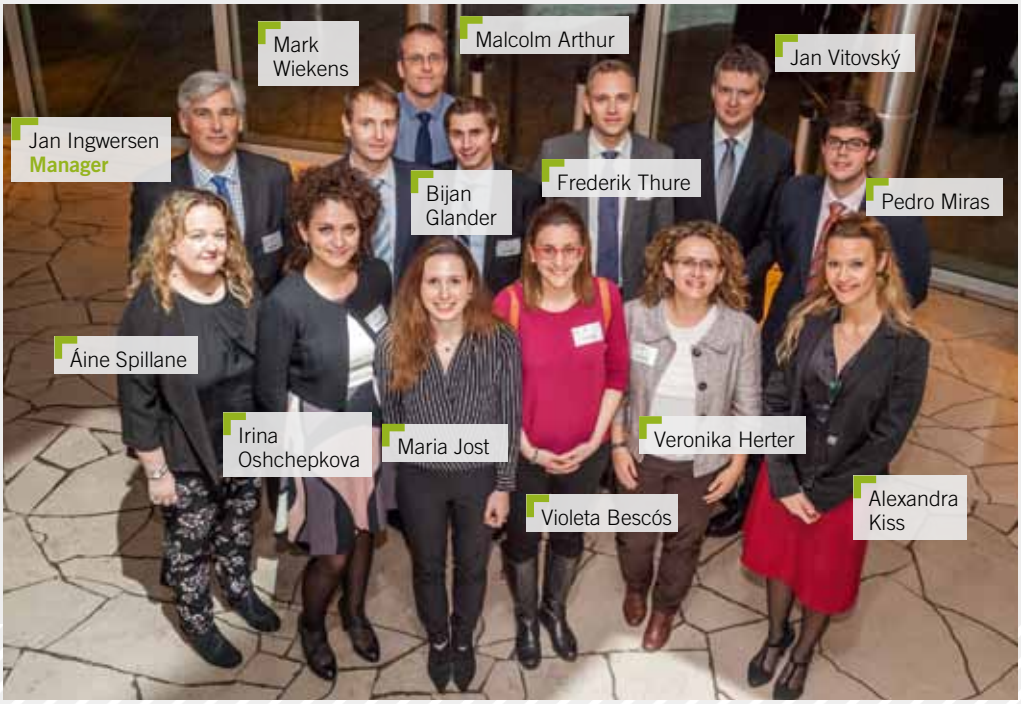
Since its foundation, ENTSOG member TSOs have provided wide coverage of the European gas market. In addition, ENTSOG's articles of association were modified in December 2010 to admit TSOs from EU countries currently derogated from the Third Energy Package, such as the Baltic States, as associated partners able to participate in its activities.

In February 2011, TSOs from Third Party countries (candidates for EU accession, members of the Energy Community or EFTA) interested in following development of the network codes were also admitted to the association as observers.

Team

MANAGEMENT SUPPORT TEAM

MARKET TEAM



SYSTEM DEVELOPMENT TEAM

SYSTEM OPERATION TEAM

2009 – 2014: Five Years of ENTSOG – Time to Celebrate!

In December 2014 ENTSOG invited its stakeholders and member TSOs to the Atomium in Brussels. Five years after its foundation, it was time to celebrate and look back on the history of ENTSOG and its achievements.

The experience of the European Network of Transmission System Operators for Gas commenced earlier than the requested timing imposed by the Regulation (EU) 715/2009. In fact ENTSOG was founded on December 1st 2009. The transmission system operators decided to gather together in due time as they were aware of the challenges of the tasks that the regulation put on them.

After all the changes imposed by the first two energy packages, the TSOs had to now take on board the last challenge: namely the finalisation of the internal energy market. This included more specifically the preparation of documents or network codes which would become the main milestones for the internal energy market. The TSOs could therefore for the first time have the chance to be an active part in the preparation of European laws. This was and still is both a great opportunity and responsibility for TSOs.

The electricity sector was considered to be well ahead and gas always lagging behind; but after five years, ENTSOG has demonstrated that despite the challenges being big, several targets have also been reached for gas. The number of network codes that have so far been developed through the consultation process involving interested parties is four network codes and one code amendment.

The involvement of the widest possible interested audience was forefront in the mind of all TSOs when developing the scope of this process and the involvement of the market players were considered by ENTSOG to be the most crucial. In fact only through good co-operation could the preparation of a real European document be possible. "ENTSOG – a fair partner to all!" this means that the cooperation amongst all the players of the gas market is necessary for the achievement of the internal energy market. Without this cooperation, the results of these first five years could not be achieved. This is just the beginning; it is necessary to keep this momentum going in order to finalise the other steps foreseen by the Regulation (EC) 715/2009.

2009–2014
5th anniversary celebration

Financial Statements 2014

Balance sheet synoptic ASBL Values EUR	Note	2014	2013

ASSETS

FIXED ASSETS		20/28	**509,651.22**	**621,118.23**
I.	**Preliminary expenses**	20		
II.	**Intangible assets (exh. I, A)**	21		
III.	**Tangible assets (exh. I, B)**	22/27	**509,651.22**	**621,118.23**
	A. Land and Buildings	22		
	1. Belonging fee-simple to the association	22/91		
	2. Other	22/92		
	B. Fixtures, machinery and equipment	23		
	1. Belonging fee-simple to the association	231		
	2. Other	232		
	C. Furniture and vehicles	24	134,337.56	176,175.88
	1. Belonging fee-simple to the association	241	134,337.56	176,175.88
	2. Other	242		
	D. Leasings and similar rights	25		
	E. Other tangible assets	26	375,313.66	444,942.35
	1. Belonging fee-simple to the association	261	(285,464.08)	(210,399.39)
	2. Other	262	660,777.74	655,341.74
	F. Fixed assets in progress and payments on account	27		
IV.	**Long-term investments – more than one year (exh. I, C and II)**	28		

CURRENT ASSETS		29/58	**1,120,399.14**	**1,140,321.01**
V.	**Long-term accounts receivable – more than one year**	29		
	A. Trade receivables	290		
	B. Other accounts receivable	291		
	among which accounts not bearing any interests or only abnormally low interests 2	915		
VI.	**Stocks and orders in process**	3		
	A. Stocks	30/36		
	B. Orders in process	37		
VII.	**Short-term receivables – up to one year**	40/41	**115,443.21**	**50,904.91**
	A. Trade receivables	40	50,626.72	2,828.92
	B. Other receivables	41	64,816.49	48,075.99
	among which accounts not bearing any interests or only abnormally low interests	415		
VIII.	**Short-term investments (exh. II)**	50/53		
IX.	**Cash assets**	54/58	**986,555.67**	**1,056,536.68**
X.	**Accruals**	490/1	**18,400.26**	**32,879.42**

TOTAL ASSETS		**1,630,050.36**	**1,761,439.24**

Balance sheet synoptic ASBL Values EUR	Note	2014	2013

LIABILITIES AND OWNERS' EQUITY

PARTNERSHIP FUND		10/15	**1,138,756.15**	**1,185,259.65**
I.	**Accumulated surplus**	10	**619,892.00**	**619,892.00**
	A. Starting asset base	100	619,892.00	619,892.00
	B. Fixed capital	101		
III.	**Surplus on revaluation**	12		
IV.	**Designated funds (exh. III)**	13	**300,000.00**	
V.	**Profit carried forward**	140	**218,864.15**	**565,367.65**
	Loss carried forward (-)	141		
VI.	**Capital subsidies**	15		
PROVISIONS		16		**131,916.42**
VII.	**A. Provisions for risks and liabilities (exh. IV)**	160/5		**131,916.42**
	B. Provisions for gifts and bequests with right to repossess (exh. IV)	168		
LIABILITIES		17/49	**491,294.21**	**444,263.17**
VIII.	**Long-term liabilities – more than one year (exh. V)**	17		
	A. Financial liabilities	170/4		
	1. Credit institutes, Leasing and similar liabilities	172/3		
	2. Other loans	174		
	B. Trade accounts payable	175		
	C. Payments on account for orders	176		
	D. Other liabilities	179		
	1. Interest-bearing	1790		
	2. Not bearing any interests or with abnormally low interests	1791		
	3. Securities in cash	1792		
IX.	**Short-term liabilities – up to one year (exh. V)**	42/48	**488,794.21**	**388,763.17**
	A. Long-term liabilities (more than one year) falling due this year	42		
	B. Financial liabilities	43		
	1. Credit institutes	430/8		
	2. Other loans	439		
	C. Trade payables	44	435,321.68	327,823.37
	1. Suppliers	440/4	435,321.68	327,823.37
	2. Notes payable	441		
	D. Payments on account for orders	46		
	E. Taxes, salaries and social liabilities	45	53,472.53	60,939.80
	1. Income taxes	450/3		
	2. Pay roll and social expenses	454/9	53,472.53	60,939.80
	F. Miscellaneous liabilities	48		
	1. Bonds, matured coupons and securities in cash	480/8		
	2. Other interest-bearing liabilities	4890		
	3. Other liabilities bearing no interests or abnormally low interests	4891		
X.	**Accruals**	492/3	**2,500.00**	**55,500.00**
TOTAL LIABILITIES AND OWNERS' EQUITY			**1,630,050.36**	**1,761,439.24**

Balance sheet synoptic ASBL Values EUR	Note	2014	2013

2. INCOME STATEMENT

I.	**Operating revenues and expenses**	D		
	Sales and services among	70/74	6,695,631.77	5,007,159.85
	whichTurnover	70	6,587,930.81	4,905,430.48
	which Fees, donations, bequests and grants	73		
	Procurement, merchandise,miscellaneous goods and services	60/61	(6,057,784.89)	(5,333,672.68)
A.B.	**Gross operating margin (positive balance)**	70/61	**637,846.88**	
	Gross operating margin (negative balance) (-)	61/70		**(326,512.83)**
	C. Salaries, wages, social expenses and pensions (exh. VI, 2) (-)	62	(679,953.10)	(812,695.93)
	D. Depreciations and amounts written down on preliminary expenses, tangible and intangible assets	630	(132,918.50)	(143,888.03)
	E. Amounts written down on stock, orders in progress and on trade debts (allowance +, reversal -)	631/4		
	F. Provisions for risks and liabilities (allowance +, application and reversal -)	635/8	131,916.42	(131,916.42)
	G. Other operating expenses (-)	640/8	(0.78)	(562.96)
	H. Operating expenses f or restructuring (+)	649		
	Operating profit (+)	70/64		
	Operating loss (-)	64/70	**(43,109.08)**	**(1,415,576.17)**
II.	**Financial revenues**	75	**1,767.66**	**3,991.04**
	Financial expenses (-)	65	**(5,162.08)**	**(5,210.12)**
	Current profit before tax (+)	70/65		
	Current loss before tax (-)	65/70	**(46,503.50)**	**(1,416,795.25)**
III.	**Extrordinary revenues**	76		
	Extraordinary expenses (-)	66		**(42.44)**
	Profit of current accounting year before tax (+)	70/66		
	Loss of current accounting year before tax (-)	66/70	**(46,503.50)**	**(1,416,837.69)**

Press Releases 2014

22 January	ENTSOG publishes 2 Launch Documentations: One for the development of a NC on Harmonised Transmission Tariff Structures for Gas and another one on a Proposal for New and Incremental Capacity
21 January	ENTSOG organises workshop on INT NC
30 January	ENTSOG publishes final project plans
03 February	ENTSOG launches formal consultation on BRS for Nomination
19 March	ENTSOG publishes Annual Report 2013
27 March	TSOs of the South Region publish 2nd edition of GRIP
23 April	ENTSOG adopts Summer Supply Outlook 2014 & Summer Review 2013
14 May	ENTSOG publishes BEMIP GRIP
16 May	ENTSOG launches consultation on capacity booking platforms
19 May	ENTSOG publishes CEE GRIP
30 May	ENTSOG launches two consultations
04 June	ENTSOG publishes Southern Corridor GRIP
30 June	ENTSOG opens public stakeholder consultation on AWP 2015
03 July	ENTSOG launches the collection of infrastructure project for TYNDP 2015 and second PCI selection
01 August	TSOs of the South–North Corridor Region publish their Gas Regional Investment Plan 2014–2023
18 August	ENTSOG publishes the adapted ESW Cost-Benefit Analysis Methodology
30 September	ENTSOG launches the New Transparency Platform
03 November	ENTSOG publishes the Winter Supply Outlook 2014/15 & Winter Review 2013/14
04 November	ENTSOG publishes Report on capacity booking platforms
07 November	ENTSOG launches Stakeholder Support Process on TAR NC
12 November	ENTSOG publishes the System Development Map 2013 in cooperation with GIE
26 December	ENTSOG submits INC Proposal and TAR NC to ACER

Stakeholder Consultations & Workshops 2014

INTEROPERABILITY

25 February	Interoperability Network Code Data Exchange requirements Workshop
09 September	AS4 communication protocol Workshop

TYNDP

22 January	Kick-off Stakeholder Joint Working Session (SJWS) on TYNDP and CBA methodology
18 February	2nd SJWS on TYNDP and CBA methodology
05 March	3rd SJWS for the development of TYNDP and CBA
27 March	4th SJWS for the development of TYNDP and CBA
30 April	5th SJWS for the development of TYNDP and CBA
13 May	Final SJWS for the development of TYNDP and CBA
26 May	9th TYNDP/CBA Workshop

TRANSPARENCY

11 December	ENTSOG 8th Transparency Workshop

TARIFF

15 January	TAR Kick-Off Workshop
11 February	TAR SJWS 1
27 February	TAR SJWS 2
14 March	TAR SJWS 3
26 March	TAR SJWS 4
09 April	TAR SJWS 5
25 June	TAR Consultation Workshop
24 September	TAR Refinement Workshop

INCREMENTAL

14 January	INC Kick-Off Workshop
31 January	WS 2 GAC on INC CAP
10 February	INC SJWS 1
26 February	INC SJWS 2
13 March	INC SJWS 3
25 March	INC SJWS 4
08 April	INC SJWS 5
24 June	INC Consultation Workshop
23 September	INC Refinement Workshop

CAPACITY

16 March	BRS Stakeholders Workshop
02 July	CAP–Booking platform Workshop
22 September	CAM Roadmap stakeholders meeting

Abbreviations

ATSO KG	Adjacent TSO Kernel Group
AUC KG	Auctions Kernel Group
ACER	Agency for the Cooperation of Energy Regulators
AWP	Annual Work Programme
BAL NC	Network Code on Gas Balancing of Transmission Networks
BAL WG	Balancing Working Group
bcm	Billion cubic metres
BOA	ENTSOG Board
BRS	Business Requirements Specifications
CAM	Capacity Allocation Mechanisms
CAM NC	Network Code on Capacity Allocation Mechanisms in Gas Transmission Systems
CAM WG	Capacity Allocation Working Group
CARP KG	Cost Allocation and Reference Price Kernel Group
CBA	Cost-Benefit Analysis
CBC&IP KG	Cross-border Coordination and Information Provisions Kernel Group
CEER	Council of European Energy Regulators
CEF	Connecting Europe Facility
CEN	European Committee for Standardization
CMP	Congestion Management Procedures
CNOT	Common Network Operations Tools
DE KG	Data Exchange Kernel Group
DSO	Distribution System Operator
EC	European Commission
EDS	European Dispatch Service
EFTA	European Free Trade Area
EIP	Energy Infrastructure Priorities
ENTSO-E	European Network of Transmission System Operators for Electricity
ENTSOG	European Network of Transmission System Operators for Gas
ERGEG	European Regulator's Group for Electricity and Gas
ESW	Energy System-Wide
ET&TI KG	Economic Test and Tariff Issues Kernel Group
EU	European Union
FG	Framework Guidelines
GCG	Gas Coordination Group
GIE	Gas Infrastructure Europe
GRIP	Gas Regional Investment Plan
GTE	Gas Transmission Europe
INC AKG	Incremental Advisory Kernel Group
INT NC	Network Code on Interoperability and Data Exchange Rules
INT WG	Interoperability Working Group
KG	Kernel Group(s)
MW	Megawatt
NeMo KG	Network Modelling Kernel Group
NRA	National Regulatory Authority
PCI	Projects of Common Interest
OS KG	Open Seasons Kernel Group
REMIT	Regulation on Energy Market Integrity and Transparency
RES	Renewable Energy Sources
ResDis KG	Reserve Prices and Discounts Kernel Group
S&D KG	Supply & Demand Kernel Group
SJWS	Stakeholder Joint Workshops
SoS	Security of Supply
STSP	Short-term Standardised Products
TAR NC	Network Code on Harmonised Transmission Tariff Structures for Gas
TEN-E	Trans-European Energy Networks
TP	Transparency Platform
TRA WG	Transparency Working Group
TReRe KG	Transparency and Revenue Directory Kernel Group
TSO	Transmission System Operator
TYNDP	Ten-Year Network Development Plan
UIOLI	Use it or lose it
UGS	Underground Gas Storage
WDO	Within-day Obligations
WS	Workshop(s)

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