

Securing Europe's energy future

implementing the internal
market for gas

**ENTSOG - A FAIR
PARTNER TO ALL!**

Key facts 2012

Covering ENTSOG members, associated partners and observers

Number of pressure reduction stations

10,640

Total power installed in the compressor stations

9,215 MW

Number of kilometers in the network

200,266 km

Average number of TSOs through whose systems gas flows:

$(918/528) = 1.74$

918 bcm

Total transported volume based on the addition of the transported volumes* through each transmission system:

(This figure reflects how many systems the gas needed to cross before reaching the final consumer)

528 bcm

Total transported volume* based on the European gas system perspective:

(This figure reflects how much gas was consumed, injected into the underground storage, and exported to non-ENTSOG members)

27,606 employees

* Total transported volume means the volume that entered the transmission system from imports, national production and storage



Contents

Chapter 1

Our Mission	05
The road ahead.....	06
At full speed.....	08

Chapter 2

Election of the ENTSOG Board.....	11
Activities.....	12
Work Programme Status - End 2012.....	15
Deliverables 2012	16
Targets for 2014.....	17

Chapter 3

Market	20
System Development	22
System Operation.....	30

Chapter 4

ENTSOG Timelines.....	35
ENTSOG Members	37
ENTSOG Team	38
Board decision on the financial statements	40
Financial statements 2012	41
Position Papers	44
Press Releases	45
Stakeholder consultations & workshops.....	46
Transmission Capacity Map	48
Abbreviations	50



Chapter 1

Mission / The road ahead / At full speed



Our mission

The role of ENTSOG (the European Network of Transmission System Operators for Gas) is to facilitate and enhance the cooperation between national gas transmission system operators (TSOs) across Europe in order to ensure the development of a pan-European transmission system in line with the energy goals of the EU.

Our specific objectives are to:

- ▲ Promote the completion of the internal market for gas and stimulate cross-border trade
- ▲ Ensure the efficient management and coordinated operation of the European gas network
- ▲ Facilitate the European network's sound technical evolution

ENTSOG's tasks are defined within the European Gas Regulation (EC) 715/2009. They include the development of pan-European Network Codes for market and system operation, elaboration of a pan-European Ten-Year Network Development Plan (TYNDP), provision of regular gas supply and demand information for the European market and the delivery of common operational tools to ensure network security and reliability.

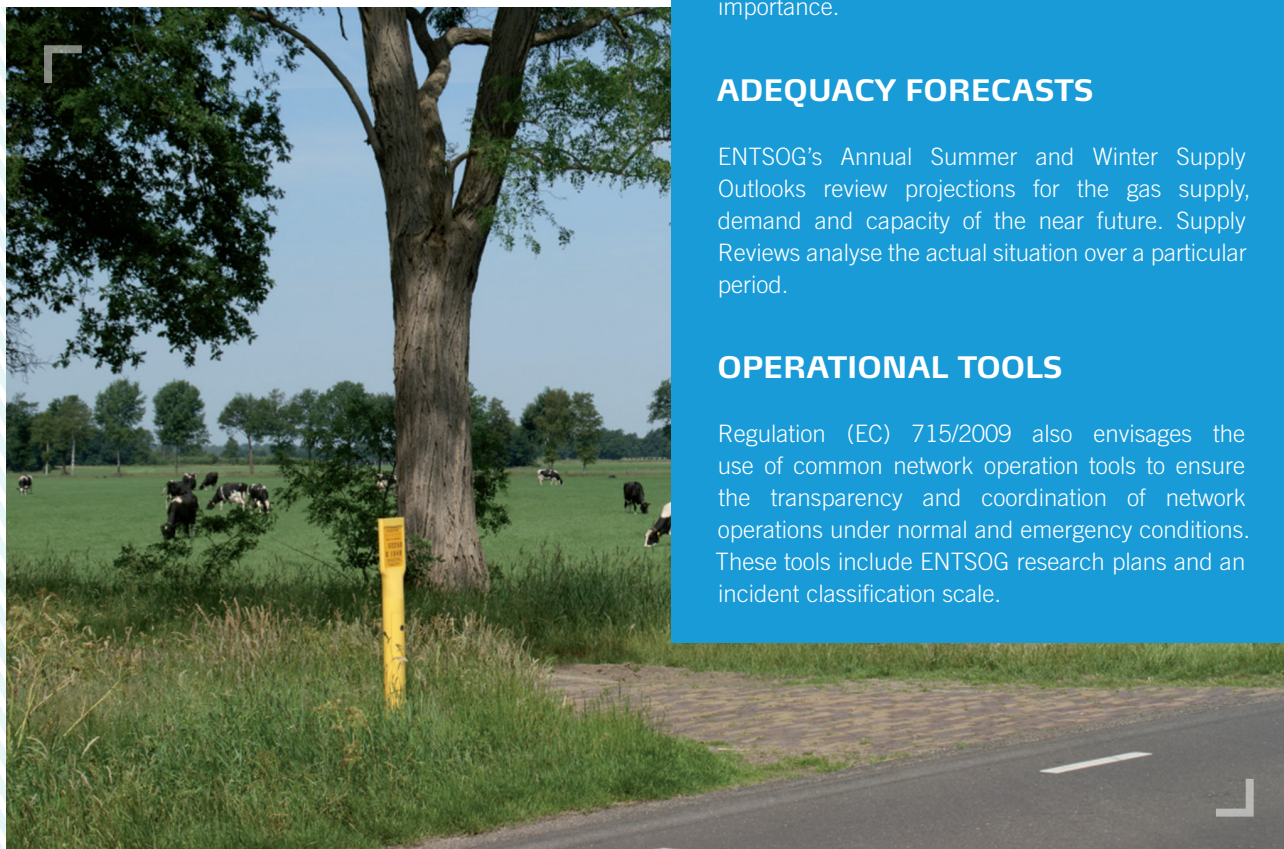


Image courtesy of Gasunie Transport

NETWORK CODES

The Network Codes developed by ENTSOG will outline the rules for gas market integration and system operation and development, covering subjects such as capacity allocation, network connection and operational security. The process begins with a request from the European Commission (EC) to ACER (Agency for the Cooperation of Energy Regulators) to submit a Framework Guideline. ENTSOG then develops the related Network Code in line with the ACER Framework Guideline, conducting extensive public consultations throughout the development process. Upon the EC's approval, the Network Code becomes legally binding, being adopted in accordance with the Comitology procedure.

NETWORK DEVELOPMENT PLAN

The TYNDP provides a picture of the European gas infrastructure and its future developments, and it maps the integrated gas network, based on a range of development scenarios. The Plan also includes a European Capacity Adequacy Outlook and an assessment of the resilience of the network. Gas Regional Investment Plans (GRIPs) lead by TSOs with ENTSOG assistance complement the TYNDP by focusing on issues that are of particular regional importance.

ADEQUACY FORECASTS

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. These tools include ENTSOG research plans and an incident classification scale.

The road ahead



<http://vimeo.com/64872201>

The Energy roadmap 2050 and its targets to be reached by 2020 are becoming ever more challenging. Overall, the EU aims at a 20% increase in renewable energy sources by 2020. At present, gas already accounts for about 20% of the energy consumption in the EU. I believe that the role of gas and the gas sector will be increasingly important in the decarbonization process and in obtaining the green growth objectives of the EU. Gas has the smallest carbon footprint among fossil fuels and it is an important enabler for renewables. New innovative technologies like power-to-gas and green gas, as well as carbon capture and storage are the best means to foster green power generation and to decrease CO₂ emissions.



As with all other sectors, the gas market has been influenced by the economic and financial situation. Fundamental investments in the gas infrastructure are however indispensable in order to reach the green growth goals set by the EU.

The evolutions of the recent years also show that the gas market and electricity market are closely connected to each other. That is why the importance of ENTSOG's and ENTSO-E's relationship and cooperation will continue to grow. I am convinced that an integrated view on power generation, with electricity and gas infrastructure as true allies, would ensure the overall optimization and efficiency of the investments made in the energy sector. In this way an overall macroeconomic optimum can be reached, which in my opinion will have a positive impact on the security of supply in Europe.

For the moment, countries are recovering from the financial crisis of 2008 and the additional Euro area debt crisis. This combined situation is still a real threat to Member State economies. Companies think twice about what to spend their

money on and what risks they are willing and able to take. Therefore, there is a need for a positive general economic background in Europe to enable fundamental investments in infrastructure and innovation.

ENTSOG has achieved a great deal for both TSOs and stakeholders during the last year. Just to mention a few of our accomplishments: we finalized the TYNDP and CAM Network Code, established a dialog between TSOs and ACER in the framework of the CAM Early Implementations Roadmap and, together with GIE, we finalized the production of the System Development maps.

But we see absolutely no reason to rest on our laurels. There is still much work to be done. We have to fulfil the transparency requirements set forth in the CMP regulation, we have to implement CAM and balancing Network Codes, we need to deliver the Interoperability Network Code, we have to start the drafting of the Tariff Network Code and the consultation on the new Ten-Year Network Development Plan 2013 2022 has to be set up. In short, it is not a small task. Luckily, we can rely on good relationships with our stakeholders and a fruitful collaboration with all of them. That is the best guarantee to successfully complete the important tasks ahead.

**STEPHAN
KAMPHUES**
President, ENTSOG



Image courtesy of Latvijas Gaze



There is still a lot of work to be done, and thanks to our fruitful relationship with all the stakeholders in the gas market we can play an important role in shaping the gas future.



Image courtesy of TIGF



At full speed



<http://vimeo.com/64872200>

The year 2012 has been a very demanding year for ENTSOG. The association began delivering the products it was committed to in line with the request of our stakeholders. The more ENTSOG delivered, the more our stakeholders asked for.

On 6 March 2012, our ENTSOG President delivered the Capacity Allocation Mechanism Network Code to Alberto Pototsching, ACER Director, in the presence of EU Commissioner Mr Oettinger. After a scrutiny period, ENTSOG began the revision of the Network Code and delivered the final version in September. At the same time, the European Commission invited ENTSOG to initiate work on the Third Network Code on Interoperability. In October, ENTSOG delivered a second Network Code to ACER, the Network Code on Balancing of the Transmission Network.

ENTSOG also published the Winter and Summer Supply Outlooks and began preparation of the new ten-year network development plan (TYNDP) 2013-2022 which was then published in February 2013. These documents completed ENTSOG's task to provide the deliverables requested for the preparation of the internal market by 2014. Finally, in 2012 ENTSOG also supported the members in the preparation and coordination of the Gas Regional Investment Plans, all of them being delivered between the summer 2011 and the spring 2012. Overall, a very impressive amount of work has been accomplished.

This progress was only possible thanks to engagement with all the stakeholders. During the numerous working sessions, in which the discussion on every single chapter of a Network Code was held, the average attendance has been 60 persons. During 2012, the association conducted numerous such meetings. This required a tremendous effort on the part of the association as well as for the stakeholders, but a good understanding and open dialogue has led to excellent results.

Another important reason for this rapid progression is the evermore-constructive environment jointly created by the European Commission, ACER and ENTSOG. All the stakeholders actively attended and participated during all the phases of the ENTSOG work, thereby collectively striving for the completion of the internal market by the end of 2014. In fact, a key issue is the open and fair discussion amongst these organizations, which is fundamental for achieving the common target established by the European Parliament at the end 2014 to enable the internal market to become a reality.

That however, was not the only rapprochement. The cold spell of February 2012 highlighted once more the growing

relationship between gas and electricity. The collaboration between ENTSO-E and ENTSOG became much more robust and the exchange of information more intense, especially in the fields of investment and the preparation of scenarios for the forecast of the European energy demand. This relationship will become even more important because the connection, interaction and mutual interests of these two organisations will continue to increase.

VITTORIO MUSAZZI

General Manager, ENTSOG



To cope with all our activities, ENTSOG Brussels has expanded its team from an adviser to a staff of twenty-nine. I offer all of them my sincere thanks for all the work done for the members of ENTSOG and for the larger community of stakeholders in preparation of the internal gas market.



“

2012 has been challenging, demanding and stressful, but we delivered a substantial volume of results. 2012 can be considered as the first year that ENTSOG has been working at full speed, delivering documents on schedule and with good content. We were able to satisfy the stakeholders, who in turn participated actively in a fair and open discussion for the preparation of the internal energy market.

Image courtesy of Gascade



Image courtesy of FGZ



Chapter 2

Election of the Board / Activities / Work Programme / Deliverables / Targets



Election of the ENTSOG Board

On 13 December 2012, the meeting of the ENTSOG General Assembly elected the new ENTSOG Board for the term 1 January 2013 to 31 December 2015.

Stephan Kamphues, CEO of Open Grid Europe GmbH, was appointed for a second mandate as President of ENTSOG, while Vittorio Musazzi (Snam Rete Gas S.p.A) was appointed for a second mandate as General Manager.

The other Board Members elected were:

Ralph Bahke (Ontras-VNG Gastransport GmbH), Philippe Boucly (GRTgaz S.A.), Torben Brabo (Energinet.dk), Francisco de la Flor García (Enagás S.A.), Dimitrios Kardomateas (DESFA S.A.), Annie Krist (Gasunie Transport Service B.V.), Gaetano Mazzitelli (Snam S.p.A.), Vladimir Outrata (NET4GAS s.r.o.), Walter Peeraer (Fluxys Belgium S.A.), Graeme Steele (National Grid Gas plc.), Harald Stindl (Gas Connect Austria GmbH) and Rafał Wittmann (GAZ-SYSTEM S.A.).

Upon his re-election Stephan Kamphues stressed that ENTSOG would continue its work in line with the spirit it has embraced since its inception. It will continue to propose solutions in all the areas it is asked to deliver and to act as a fair partner to all stakeholders and institutions that are involved in the creation of the internal gas market.



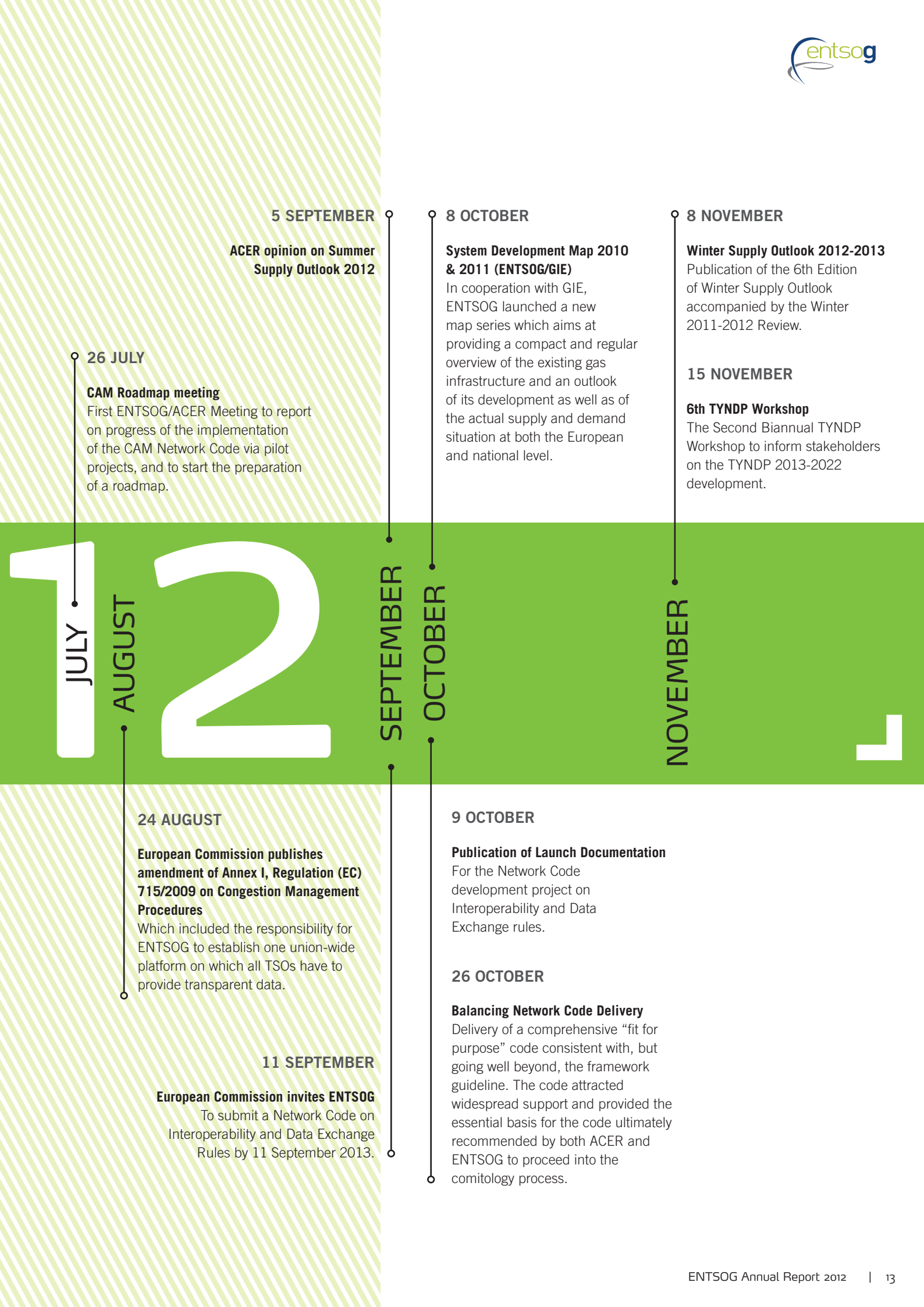
From the left to the right

First row: Gaetano Mazzitelli, Annie Krist, Harald Stindl

Second row: Graeme Steele, Francisco de la Flor García, Philippe Boucly, Walter Peeraer, Stephan Kamphues – Chairman, Rafał Wittmann, Ralph Bahke, Torben Brabo, Vladimir Outrata, Dimitrios Kardomateas

ENTSOG Activities





JULY

AUGUST

SEPTEMBER

OCTOBER

NOVEMBER

5 SEPTEMBER

ACER opinion on Summer Supply Outlook 2012

8 OCTOBER

System Development Map 2010 & 2011 (ENTSOG/GIE)

In cooperation with GIE, ENTSOG launched a new map series which aims at providing a compact and regular overview of the existing gas infrastructure and an outlook of its development as well as of the actual supply and demand situation at both the European and national level.

8 NOVEMBER

Winter Supply Outlook 2012-2013

Publication of the 6th Edition of Winter Supply Outlook accompanied by the Winter 2011-2012 Review.

15 NOVEMBER

6th TYNDP Workshop

The Second Biannual TYNDP Workshop to inform stakeholders on the TYNDP 2013-2022 development.

26 JULY

CAM Roadmap meeting

First ENTSOG/ACER Meeting to report on progress of the implementation of the CAM Network Code via pilot projects, and to start the preparation of a roadmap.

24 AUGUST

European Commission publishes amendment of Annex I, Regulation (EC) 715/2009 on Congestion Management Procedures

Which included the responsibility for ENTSOG to establish one union-wide platform on which all TSOs have to provide transparent data.

9 OCTOBER

Publication of Launch Documentation

For the Network Code development project on Interoperability and Data Exchange rules.

11 SEPTEMBER

European Commission invites ENTSOG

To submit a Network Code on Interoperability and Data Exchange Rules by 11 September 2013.

26 OCTOBER

Balancing Network Code Delivery

Delivery of a comprehensive “fit for purpose” code consistent with, but going well beyond, the framework guideline. The code attracted widespread support and provided the essential basis for the code ultimately recommended by both ACER and ENTSOG to proceed into the comitology process.

Once the Network Codes are adopted and become legally binding, ENTSOG's role will be expanded to monitor their implementation by Member States.

The EU requires ENTSOG to develop the Network Codes that govern the rules for gas market integration and cross-border transmission. The codes primarily cover market access and capacity allocation, system balancing, tariff structures and network interoperability, security and reliability.

In addition to its main system development activities, such as preparation of the TYNDP and Summer and Winter Outlook reports, ENTSOG also develops common network operation tools that assist in solving issues regarding market transparency, TSO data exchange and the harmonization of maintenance information.

At a regional level, ENTSOG actively promotes TSO cooperation by aiding in the tasks above and, more particularly, in assisting TSOs in the preparation of Gas Regional Investment Plans (GRIPs) that support the TYNDP. ENTSOG facilitates the communication between member TSOs and provides expert opinions to the EC, ACER and other stakeholders whenever required. We also make recommendations for the technical cooperation between the EU and third country TSOs.

GENERAL ASSEMBLY

ENTSOG operations are governed by the General Assembly. Its tasks include the admission of members, the appointment of the Management Board, General Manager and Business Area Managers, the establishment of working and regional groups, and the adoption of ENTSOG deliverables.

MANAGEMENT BOARD

The ENTSOG Management Board has a central role within the structure and implements General Assembly decisions. In conjunction with the General Manager, the Board coordinates overall ENTSOG representation and the day-to-day management, distributing projects between the working groups and teams and coordinating their work. The Management Board consists of twelve members appointed by the General Assembly.

BUSINESS AREAS

ENTSOG's operations are divided into three business areas (Market, System Development and System Operation) and a number of expert working and kernel groups:

Market

ENTSOG's market activities create the essential framework for the single market. All three Working Group areas (capacity, network balancing and tariff harmonization) involve the development of individual Framework Guidelines and Network Codes.

System Development

System Development covers all activities related to the development of the pan-European network, most notably the TYNDP and Supply Outlook reports. In addition, TSOs use the Investment Working Group platform to coordinate the development of Gas Regional Investment Plans (GRIPs). The Working Group also monitors, analyses and prepares recommendations on legislative proposals on infrastructure development and investment, and it represents ENTSOG in the Gas Coordination Group.

System Operation

System Operation is primarily responsible for the development of the technical Network Codes, as well as providing other Working Groups with technical input for the development of codes and tools that facilitate the exchange of gas across networks. System Operation also works on other projects such as common operational tools, the transparency platform, the implementation of transparency guidelines, IT and communications procedures and the publication of network maintenance information.

Support groups

The ENTSOG management team has five support groups that provide compliance, financial and other services across the association: Legal, Financial, Ad hoc Dedicated Task Forces, Administration and Research.

WORK PROGRAMME STATUS - END 2012

ACTIVITY	GOAL	DELIVERABLE & COMPLETION DATE	CONSULTATION WITH	STATUS/COMMENTS
ENTSOG RECRUITMENT PLAN	Increase Brussels-based staff from 27 persons (end 2011) to 33 persons (end 2012)	(Q1-Q4/2012)		ENTSOG Team in Brussels had 30 persons on duty at the end of 2012.
ANNUAL REPORT 2011	Preparation of the first Annual Report	Publication (Q3/2012)		The Annual Report was published in Q4/2012.
ANNUAL WORK PROGRAMME 2013	Preparation of the Annual Work Programme 2013	Publication (Q1-Q4/2012)	Public consultation (Q3/2012)	The Annual Work Programme will be published in Q1/2013.
PROJECT PLAN FOR TARGET MODEL	Participate in the finalization of the Target Model and monitor the first phase of Target Model application in close interaction with ACER and TSOs	CEER Publication		ENTSOG provided CEER with comments at all stages of this initiative
PROJECT PLAN FOR CAPACITY	Submission of the Network Code on Capacity Allocation Mechanism (CAM) on 9 March 2012	Code delivered Q1/2012		
	Once published, ENTSOG will give follow-up assistance to ACER and the EC	All feedback provided to EC as requested		Ongoing—EC aspires for comitology committee approval in Q2/2013
	The group is working on issues linked to capacity such as Congestion Management Procedures which are currently being dealt with by the EC	All feedback provided to EC as requested		Implementation monitoring will be reported to Madrid in conjunction with ACER
PROJECT PLAN FOR BALANCING	Deliver Balancing Network Code on 5 November 2012	Code delivered Q4/2012		
PROJECT PLAN FOR THE TARIFF	Support other code development and either develop a tariff Network Code or support the EC in developing tariff guidelines	Framework Guideline consultation response delivered in Q3/2012		
PROJECT PLAN FOR INVESTMENT	Summer Supply Outlook 2012		Feedback from stakeholders requested after each release; simulation cases linked to TYNDP Development	Publication on 24 May 2012
	Summer 2012 Review			Publication on 8 Nov 2012
	Winter Supply Outlook 2012-2013			
	Winter 2011-2012 Review			
PROJECT PLAN FOR INVESTMENT	TSO deliverables: Gas Regional Investment Plans (GRIPs)		Public consultation on all GRIPs	Publication in Q4/2011, Q1+2/2012
	Preparatory work on TYNDP 2013-2022		Through Stakeholder Joint Workshops (SJWs) and dedicated Workshops (WSs)	7 SJWs, 2 WSs
	Work on the facilitation of the investment process		Public consultation on CAP-related documents and TYNDP	TYNDP 2013-2022 contains a separate chapter on Barriers to Infrastructure Investment and Potential Solutions. This chapter gives an overview of the situation with the aim of stimulating further discussion with Stakeholders and Authorities within the Framework of the Capacity Market Development and Infrastructure Guidelines Implementation.
PROJECT PLAN FOR TRANSPARENCY	Improve data quality provided on the Transparency Platform and increase the number of TSOs actively participating in the project	Two new TSOs participating (Q1-Q4/2012)		Participation shall be binding for all TSOs as of 1st Oct 2013
	Further develop the Transparency Platform based on stakeholder feedback	Commercial information through interactive geographical map and automatic download tool for direct access to TP database (Q1/2012)	Consultation workshop (Q3/2012)	Upgraded platform to be available in Q4/2013
	Promote a harmonized and proper implementation of transparency requirements	Internal monitoring of implementation (continuous process)		
PROJECT PLAN FOR INTEROPERABILITY	Prepare the delivery of the Network Code on Interoperability and Data Exchange Rules in 2013	Publication of consultation documents: project plan, launch documentation, business rules (Q4/2012)	Public consultation (Q4/2012)	Network Code to be delivered by 11 Sep 2013
NETWORK OPERATION TOOLS AND TECHNICAL COOPERATION BETWEEN COMMUNITY AND THIRD COUNTRY TSOs	Network Operation Tools	Proposal for a common format for maintenance publication (Q1/2012).		Business Requirement Specifications for data exchange needs are under preparation
	Technical Cooperation Between Community and Third Country TSOs	Participation of third country TSOs in Interoperability Network Code consultation processes (Q4/2012)	Consultation workshops (Q4/2012)	Further involvement foreseen in 2013

ENTSOG deliverables 2012

1 JANUARY	Annual Work Programme 2012
6 MARCH	Network Code on Capacity Allocation Mechanism submitted
24 MAY	Summer Supply Outlook 2012 and Summer 2011 Review
17 SEPTEMBER	Network Code on Capacity Allocation Mechanism re-submitted
9 OCTOBER	Annual Report 2011
10 OCTOBER	Launch Documentation for the development of a Network Code on Interoperability and Data Exchange Rules
8 NOVEMBER	Winter Supply Outlook 2012-13 and Winter 2011-12 Review



Image courtesy of Gasunie Transport

Targets for 2014

On 4 February 2011, the European Council decided to set the 2014 deadline for the completion of the internal energy market in Europe. From that moment on, all the interested parties and stakeholders have been under severe pressure to achieve this ambitious goal.

As foreseen in Regulation 715/2009, ENTSOG was specifically asked to deliver Network Codes under a very strict timeline of one year and to consult all the interested stakeholders during this period. The Network Codes on Capacity Allocation Mechanisms, on Balancing, on Interoperability and on the Harmonization of Tariff Structures, will prove to be cornerstones of the soon to be realized internal energy market. This unified market can then in turn be the foundation of Europe's energy policy of the future.

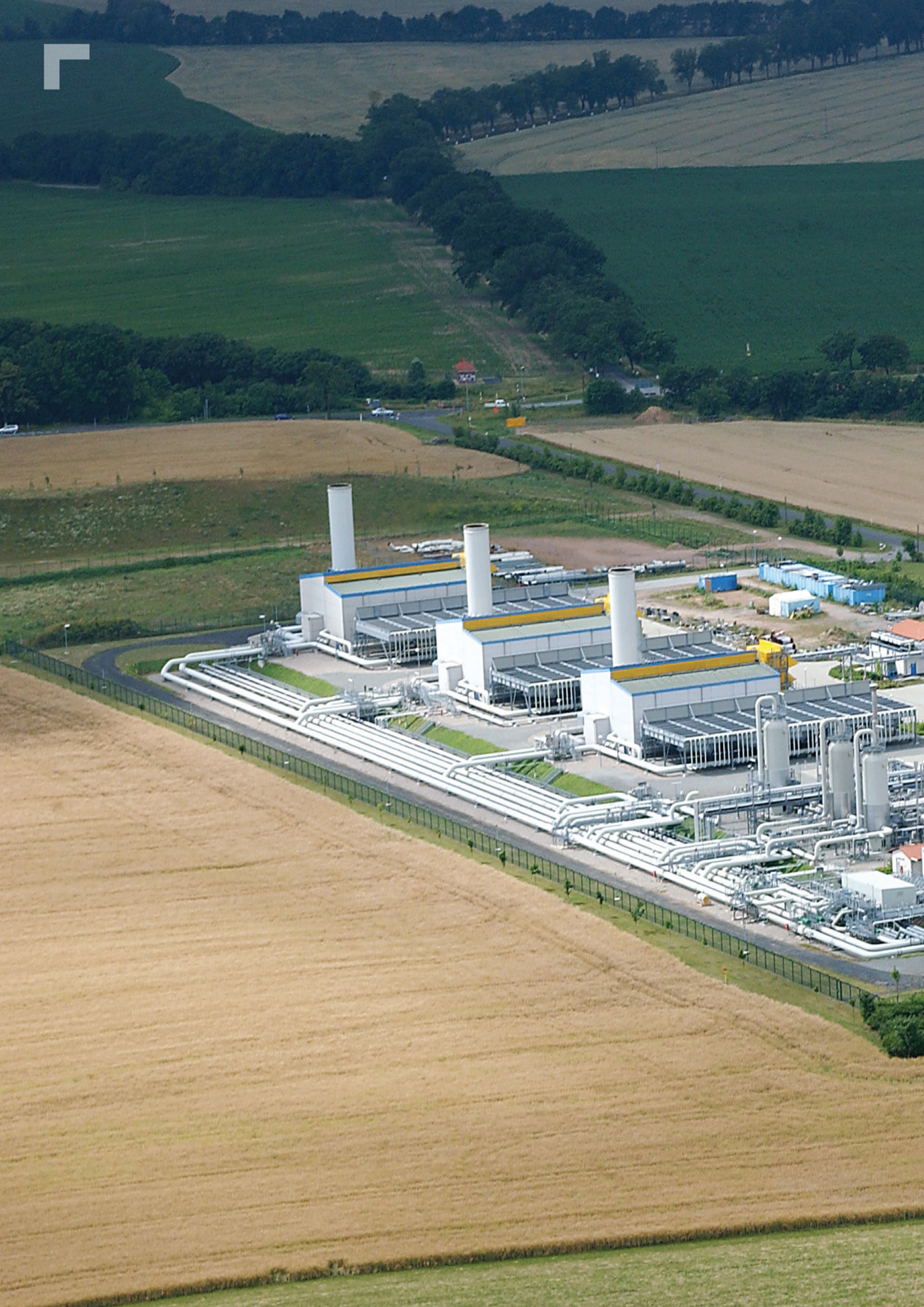
As an addition to the Network Codes, the ENTSOG Ten Year Network Development Plan (TYNDP) is one of the most interesting and complete overviews of the gas situation for the future decade. This document will be updated and expanded for the next issue, foreseen by February 2015, and it will also contain the first CBA methodology implementation for the definition of the projects of common interest for the EU.

In order to answer to the specific demands, ENTSOG has and will dedicate the period from 2011 to 2014 to the completion of the Network Codes and to discussions on the preparation of future codes. This path of action will guarantee the consolidation of the common ground of the gas market and will make sure that we can finalize the new issue of the Ten-Year Network Development plan as planned.

ENTSOG will tackle these challenges through the combined strength of our permanent team of high level gas professionals in Brussels and the support of all our Members. Together, we will collaborate in the various internal working groups and the stakeholders joint working sessions, in order to create transparent and effective discussions that will result in robust documents clearing the path for a real internal energy market.



Image courtesy of GRTgaz





Chapter 3

Market / System Development / System Operation



Market

The task of ENTSOG's Markets team is to deliver a coherent set of Network Codes, which with the contribution of the other ENTSOG areas, will eventually enable a single gas market in Europe. The team is responsible for three specific codes: capacity allocation mechanisms (CAM), gas balancing in transmission networks and transmission tariffs. Together with the Network Code on Interoperability, they make up the core of the future single market.

CAPACITY ALLOCATION MECHANISMS (CAM)

In March, ENTSOG submitted the first Network Code on Capacity Allocation Mechanisms to ACER. This marked the end of a development process that began in early 2011 and involved intensive discussions with all stakeholders regarding how gas transmission capacity will be allocated in the future across the EU. The Network Code introduces new provisions for harmonized auctions (design and timing), standard capacity products and the bundling of cross-border capacity as well as supporting provisions on interruptible capacity, principles of co-operation, booking platforms and tariffs. The Network Code entered the comitology process in early 2013 and is expected to become law in the second half of the year. Parallel with the development of the Network Code on CAM, ENTSOG contributed to the finalization of the guidelines on Congestion Management Procedures, which became law in August 2012.

BALANCING

The objective of the Network Code on gas balancing is to promote the harmonization of balancing regimes in order to encourage and facilitate gas trading across systems and to support the development of competition within the EU, both between Member States and within each Member State, and thereby move towards better market integration.

Throughout 2012, ENTSOG organized intensive consultation, working closely with stakeholders in order to deliver a Network Code on gas balancing to ACER on 26 October 2012. During this process, ENTSOG published numerous documents, which are readily available on the website (www.entsog.eu).

BALANCING NETWORK CODE DEVELOPMENT

STAGE	PUBLISHED
Stakeholder Joint Working Sessions March 2012	<ul style="list-style-type: none"> ▲ Workshop materials ▲ Business Rules Proposals ▲ SJWS Conclusions
Network Code General Consultation April 2012 - June 2012	<ul style="list-style-type: none"> ▲ Draft Network Code on gas balancing ▲ Supporting Document for public consultation ▲ Consultation Response document ▲ CEEC Road-show materials ▲ Consultation workshop materials ▲ Consultation workshop conclusions
Refinement Process July 2012 - August 2012	<ul style="list-style-type: none"> ▲ Consultation responses published ▲ Refinement workshop materials ▲ Refinement workshop conclusions
Stakeholder Support Process September 2012	<ul style="list-style-type: none"> ▲ Refined Network Code on gas balancing ▲ Analysis of decisions ▲ Stakeholder Response form
Final Steps October 2012	<ul style="list-style-type: none"> ▲ Stakeholder responses published ▲ Report on stakeholder responses
Delivery 26 October 2012	<ul style="list-style-type: none"> ▲ Final Network Code on gas balancing ▲ Accompanying for the Network Code

Balancing Network Code delivered to ACER provided harmonized rules in respect of:

- ▲ *Trade notifications:* How trades at the virtual trading point are notified to the TSO.
- ▲ *Operational Balancing:* How the TSO shall undertake balancing actions in order to ensure the transmission system is operated in an efficient and economic manner.
- ▲ *Nominations:* A harmonized set of rules under which network users can nominate and re-nominate their gas flows at interconnection points.
- ▲ *Daily Imbalance Charges:* The incentives for network users to balance their inputs and off takes to the transmission network each gas day.
- ▲ *Within Day Obligations:* Criteria that apply to any obligation on network users inputs and off takes during the gas day.
- ▲ *Neutrality arrangements:* Rules regarding the TSOs neutrality in carrying out their balancing role.
- ▲ *Information Provision:* Details the information that TSOs together with DSOs will provide to network users in order to allow them to balance their inputs and off takes over a gas day.
- ▲ *Interim measures:* A toolkit to allow a transition to the target model using a sensible set of options over a limited period of time.
- ▲ *Cross Border Cooperation:* A process for investigating potential zone mergers as well as setting out ENTSOG continued monitoring role.



Image courtesy of REN

TARIFFS

Tariffs are seen as a priority area for Network Code development by ACER and the EC. ENTSOG engaged with ACER and the EC to explore many aspects of Transmission tariff structures for natural gas across Europe. ENTSOG responded to ACER's consultation document on tariff scoping and our advisers and members have also participated in the ACER ad hoc expert groups for tariff throughout the year.

On 29 June 2012, the EC invited ACER to start the framework guideline process. Following the publication of the draft in September, ENTSOG worked with its members to provide a swift response to ACER. The final tariff framework guideline is due for submission to ACER late in 2013. The objective of the Network Code on harmonized transmission tariffs structures for natural gas will be to lay down clear and objective requirements for harmonizing the gas transmission tariff structures across the EU, contributing to non-discrimination, effective competition and the efficient functioning of the market.

INCREMENTAL CAPACITY TASK FORCE

ENTSOG established an Incremental Capacity Task Force to investigate that market-based approaches to underpin increased capacity releases are properly considered and pay due regard to all actors' interests.

The Task Force has presented relevant material at the Madrid Forum describing the many challenges and facets of the incremental capacity release consideration. Additionally, it has supported the CEER Incremental Capacity activity and contributed to ACER's incremental capacity work with Frontier Economics, in order to foster understanding of the many issues that need to be looked at when considering the development of any harmonization of the offer of incremental capacity.

PLATFORMS TASK FORCE

ENTSOG also established a Platforms Task Force to coordinate discussions and share best practice in relation to the implementation of the CAM Network Code, and in particular the development of new capacity booking platforms.

During the second half of 2012, the Task Force focused on developing a Roadmap for the early implementation of the CAM Network Code via pilot projects. This document, produced jointly by ENTSOG and ACER, aims to pave the way towards the internal energy market by building on knowledge gained in existing pilot projects and by promoting the development and convergence of projects across the EU.



System Development

The System Development business area covers all ENTSOG activities related to the development of the European gas infrastructure, most notably the TYNDP (Ten-Year Network Development Plan) and Supply Outlook reports. The activities are coordinated by the Investment Working Group.

SUMMER/WINTER SUPPLY OUTLOOKS AND REVIEWS

The aim of seasonal Supply Outlooks is to give an overview of how the European gas system can 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.

The publication of Seasonal Reviews is an ENTSOG initiative based on the internal analysis of supply and demand carried out to feed the TYNDP and Supply Outlooks. ENTSOG decided to publish such analyses in order to share their content with stakeholders and collect feedback. This initiative should ensure a robust basis for defining input data and the methodology of subsequent reports.

The Summer Supply Outlook focuses on the flexibility offered by gas infrastructures to network users during the injection season. This is captured through the modelling of each of the 183 days of the season. In that perspective, the Summer Supply Outlook 2012 has shown sufficient robustness in all parts of Europe.

The Winter Supply Outlook focuses both on the decrease of the UGS stock level during the winter and specific situations of high daily demand. The first is captured through the analysis of the aggregated supply/demand balance under different levels of supply and demand. The second consists of identifying flow patterns, through modelling, that enable the supply/demand balance in each country under high daily demand and supply-stressed situations. The inclusion of supply-stressed situations is required by ACER. It is based on the feedback received from Member States through the Gas Coordination Group.

MAIN FINDINGS OF WINTER SUPPLY OUTLOOK 2012-13 AND WINTER 2011-12 REVIEW

The European gas system was able to face a wide variety of demand situations and the robustness was sufficient in all parts of Europe, both in single day demand as well as in 14-day high daily demand situations.

As a consequence of a potential disruption of Russian transit through Ukraine, some countries would no longer have been able to meet their entire demand. This would have been an issue in most South East European countries.

The Winter 2011-12 Review had provided the opportunity to analyse the February 2012 cold spell. This event proved the ability of the gas infrastructure to react adequately to market needs. Admittedly, this was facilitated by the mildness of the first part of the winter, resulting in high stock levels prior to the cold spell. The 2011-12 Review was also a first opportunity for ENTSOG to investigate - on a European level - the link between gas and electricity markets.



Image courtesy of Energinet

TYNDP 2013-2022

Even though there was no TYNDP publication scheduled in 2012, the year was fully dedicated to the TYNDP 2013-2022. This includes the definition of the TYNDP concept and its further elaboration by ENTSOG. Public release is expected in the first quarter 2013.

ACER's opinion on the TYNDP 2011-2020 highlighted the importance of stakeholder involvement in the process. To enhance this, ENTSOG applied the concept of Stakeholder Joint Working Sessions (SJWS) to the TYNDP development. A series of seven SJWSs were organized. The aim is collecting stakeholder feedback on practical approaches to address the main improvements identified in the TYNDP 2011-2020 and collected through responses to the ENTSOG public consultation and ACER's opinion.

The SJWSs took place between January and May 2012 and covered the following topics: supply, demand, infrastructure projects, network modelling, market integration, security of supply and data collection.

The iterative discussion held during these meetings provided ENTSOG with valuable feedback and helped to better understand stakeholders' expectations and refine the TYNDP methodology accordingly. The updated methodology was presented at the 5th TYNDP workshop held in June 2012, marking the starting point for data collection.

In the meantime, in order to expand the geographical scope beyond the European Union borders, ENTSOG had worked with the Energy Community to improve regional stakeholders' involvement through a special TYNDP workshop organized in Croatia in March 2012.

In November 2012, approximately half-way through the data processing and analysis, a second workshop was held, presenting the scenarios that were being tested as preliminary results. The assessment works continued until the end of the year.

TYNDP 2013-2022 publication was slated for February 2013.

ENTSOG MAPS

The ENTSOG Network Capacity Map has enjoyed growing success since its first publication under GTE in 2001. ENTSOG has launched a new map series building on this history as well as on the development of the TYNDP, Supply Outlooks and Seasonal Reviews.

The Network Capacity Map is created by the joint forces of the ENTSOG System Operation and System Development teams. The 2012 Edition has benefited from continuous improvement based on feedback from our stakeholders. The map provides an overview of Europe's main high-pressure transmission lines and contains information on the technical capacity at cross-border Interconnection Points.

The map - which has become a market standard - is updated on regular basis and printed once a year. The last printed version was in May 2012.

The System Development Map is a new map series providing an overview of the existing gas infrastructure and an outlook on its development. The information on the map includes a detailed summary of the supply and demand situation at the European level from the perspective of a particular year, with additional details on the developments during the summer and winter seasons.

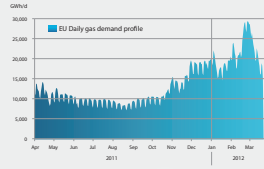
The System Development Map was initially published in October 2012 and included the 2010 and 2011 maps. Their digital version is available on the ENTSOG website. In addition, the 2011 edition was printed.

The printing format 1,600mm (W) x 1,200mm (H) will be kept for future editions.

SYSTEM DEVELOPMENT MAP 2011

EUROPEAN DEMAND

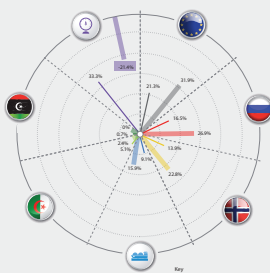
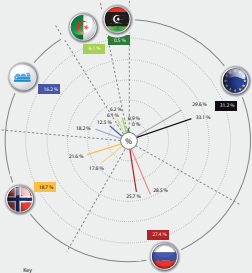
EU Total 2011 5,058,875 GWh
EU Apr 2011 - Sep 2011 (Summer) 1,809,371 GWh
EU Min. Day (14/08/2011) 7,288 GWh/d
EU Oct 2011 - Mar 2012 (Winter) 3,202,302 GWh
EU Max. Day (07/02/2012) 29,050 GWh/d



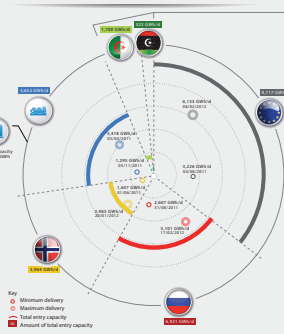
EUROPEAN SUPPLY

EU Supply Sources
Shares / Yearly-Seasonal / %

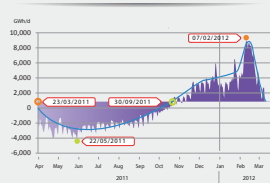
EU Supply Sources
Shares / EU Min - Max Day / %



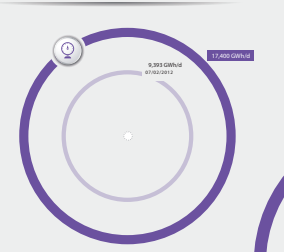
EU Supply Sources
Min-Max Seasonal Delivery / GWh/d



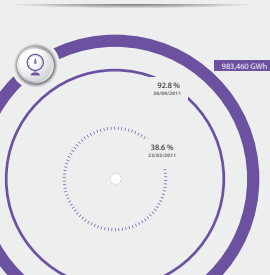
EU Storage
Seasonal Profile / GWh/d



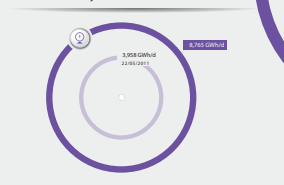
EU Storage
Withdrawal / GWh/d



EU Storage
Stock Level / GWh

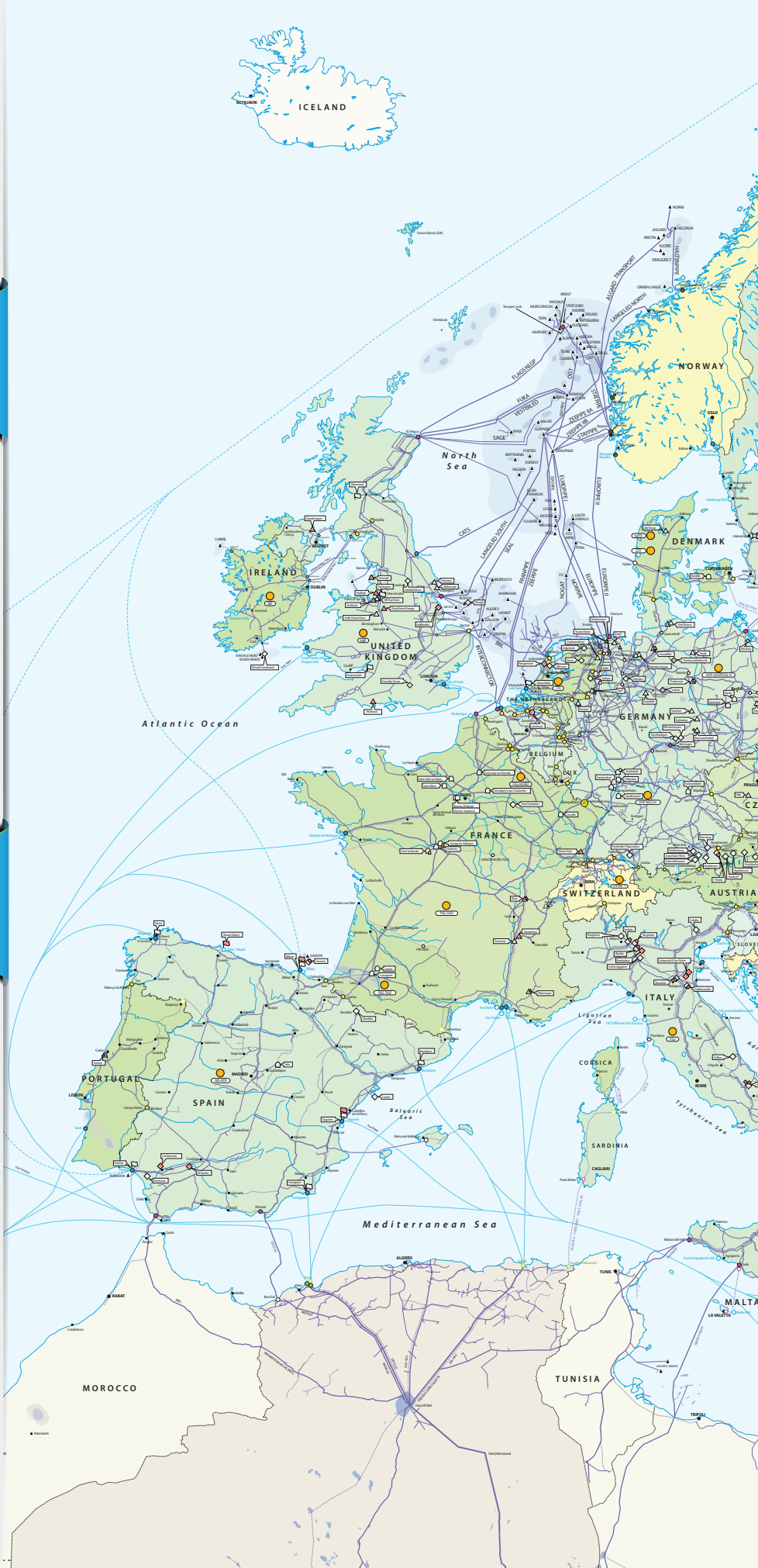


EU Storage
Injection / GWh/d



DEMAND

SUPPLY





ADDITIONAL INFO ON THE SYSTEM DEVELOPMENT MAP:

- ▲ Transmission capacities aggregated per borders
- ▲ Aggregate storage capacities (withdrawal, injection, working gas volume)
- ▲ Aggregate LNG terminal capacity (LNG storage capacity and send-out)
- ▲ Aggregate installed capacities of gas-fired power generation facilities
- ▲ Maximum national production deliverability (as registered for the covered period)
- ▲ Demand data
- ▲ 5-year evolution: indicating the increasing or decreasing trend for each of the items according to the evolution captured in the current TYNDP







For more details on this map please visit <http://www.entsog.eu/maps>

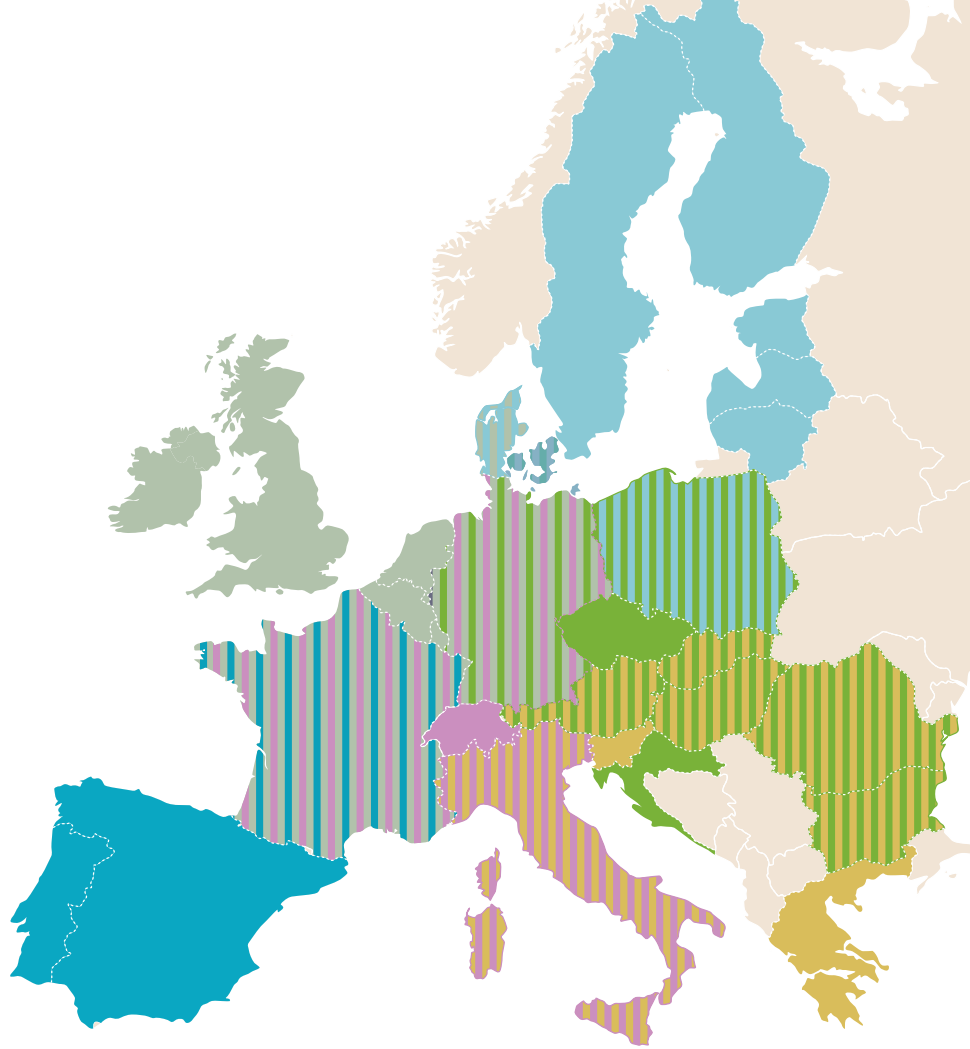
System Development



image courtesy of Gas Connect Austria

GRIP CLUSTERING

-  GRIP North-West
-  GRIP South
-  GRIP North-South CEE
-  GRIP BEMIP
-  GRIP Southern Corridor
-  GRIP South-North Corridor



SUPPORT TO GAS REGIONAL INVESTMENT PLANS (GRIPs)

Regional cooperation between TSOs is an essential feature of the gas industry because most of the gas transported and consumed in the EU originates from non-EU sources. GRIPs are a means to map the coordination between TSOs carried out within ENTSG and focusing on infrastructure development. It is the link between the ENTSG TYNDP and the various national plans.

For many years, European TSOs have cooperated to ensure that sufficient cross-border capacity is available. This close cooperation has been crucial in supporting market integration and developing security of supply for EU Member States, as well as in supporting the establishment of physically integrated markets.

The requirement to promote regional cooperation is enshrined in EU Directive 2009/73/EC and further detailed by EU Gas regulation (EC) 715/2009, which requires European TSOs to publish Gas Regional Investment Plans (GRIPs) on a biennial basis.

Based on an analysis of transmission system interconnections and operations, as well as infrastructure development needs, the ENTSG TSOs agreed to establish six regional groupings in order to develop their first GRIPs. Groupings overlap in some places to ensure that GRIPs cover all relevant cross-borders.

These are shown in the map.

The year 2012 saw the publication of the last four GRIPs of the first edition:

-  GRIP North-South CEE
-  GRIP BEMIP
-  GRIP Southern Corridor
-  GRIP South-North Corridor

Each GRIP reflects specific regional needs regarding infrastructure investment and complements the TYNDP by creating the regional link to national plans. Based on the feedback received on the First Edition, TSOs have already started working on the next edition. An overview of the scope for this work was presented during the 6th TYNDP WS.

GRIPs fall under the direct responsibility of TSOs. But ENTSG ensures the consistency between the TYNDP and the Reports, and between the individual Reports themselves. ENTSG created a common set of default data based on the last ENTSG TYNDP edition and the ENTSG Network Modelling tool to support the TSOs throughout the whole process.



System Development

GAS REGIONAL INVESTMENT PLANS (GRIPs)

REPORT (PUBLICATION DATE)	FOCUS
GRIP North-West (21 November 2011)	▲ Impact of regional transmission projects and on interconnections
GRIP South (24 November 2011)	▲ Contribution of cross-border projects in achieving European energy objectives, in particular the creation of the North-South Corridor
GRIP North-South (30 January 2012)	▲ Assessment of regional infrastructure CEE on network resilience and security of supply
GRIP BEMIP (29 March 2012)	▲ Current market analysis and challenges to market integration; outlook for regional gas infrastructure
GRIP Southern (4 April 2012)	▲ Regional infrastructure outlook Corridor covering TSOs as well as third-party promoters of projects
GRIP South-North (4 June 2012)	▲ Planned investments and the Corridor coordination of the TSOs concerned and investment consistency

SUPPORT TO THE GAS COORDINATION GROUP

The Gas Coordination Group is a platform established by Regulation (EU) 994/2010 to cover measures to safeguard the security of gas supply.

The Group's role is to exchange information and best practices, and to facilitate the implementation of security of supply (SoS) standards. Its members include the European Commission, representatives of EU Member States, ENTSOG and other international organizations, as well as the industry.

ENTSOG is often asked for its expert opinion on different SoS-related subjects and especially on the implementation

of regulation regarding bi-directional physical capability at cross-border Interconnection Points. It has also supported the Group's work by modelling the resilience of the European gas system under specific scenarios.

As in previous years, ENTSOG presented its seasonal Supply Outlooks/Reviews to the GCG. Member States and the Commission use the reports as input for their own analysis of the respective seasons. As a result of the ENTSOG Winter Review 2012 (including an analysis of the February 2012 Cold Spell), the Commission and Member States recognized the importance of the link between gas and electricity markets.

GROUP STRUCTURE

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

The Working Group is supported in that mission by four Kernel Groups focusing on specific topics:

- ▲ *Network Modelling (NeMo)*: developing and enhancing the ENTSOG network model tool and carrying out the necessary simulations in accordance with the defined situations.
- ▲ *Supply & Demand (S&D)*: analysing supply and demand data in order to increase the understanding of supply and demand development, identify trends and outline approaches for the definition and study of future scenarios.
- ▲ *Energy Infrastructure Priorities (EIP)*: carrying out analysis and providing recommendations regarding the Connecting Europe Package and drafting the pilot CBA methodology.
- ▲ *Editing*: editing the TYNDP and ensuring editorial consistency between reports.

As NeMo KG in 2010, S&D KG carried out an internal specialist workshop early 2012 to benefit from TSOs' experience on the subject. The aim of the S&D KG activities was to address stakeholders' expectations as formulated during the public consultation and ACER views on the TYNDP 2011-2020. It also provided the opportunity to work on a top-down approach for the definition of demand situations to complement the bottom-up approach used until then.

NeMo KG worked on tool improvement and focused on the automation of the process in preparation of the sharp increase in the number of simulations expected for the TYNDP 2013-2022 compared to the previous edition.

COOPERATION WITH ENTSO-E

The link between gas and electricity markets is becoming more important, and consequently the same goes for the cooperation between the ENTSOs. The current focus is on gas demand for power generation and a Cost and Benefit Analysis methodology.

As emphasized by stakeholders' feedback on the TYNDP 2011-2020 and the February 2012 Cold Spell analysis, a deeper understanding of the relationship of both markets is a requirement for meaningful TYNDP Reports and Supply

Outlooks. Close cooperation on this subject has been established between ENTSOs through the S&D KG. Some initial discussions were also started on modelling.

A key element in this process is the creation of the base scenarios that reflect the estimated development of the electricity generation and load and the gas supply and demand for the studied timeframe. It is important to align them since these scenarios are relevant in the context of infrastructure identification and assessment due to the interdependency of the gas and electricity sectors. Although the scenarios may focus on different targets (e.g. the assessment of the 2020 targets in the electricity report, assessment of the supply flexibility under different demand situations in the gas report) it is important to achieve consistency in terms of the use of gas as a source for the generation of electricity.

ENTSO-E and ENTSOG have been sharing data on the load and generation development in the timeframes being studied for the development of ENTSOG TYNDP 2013-2022. As a result, the ENTSOG's scenario of gas demand for power generation has been compared with the results of the market studies run by ENTSO-E within the TYNDP 2012. The future aim for this deliverable is to further refine the predictions on gas consumption for electricity in the chosen scenarios. This becomes even more relevant in an environment where the new intermittent electricity (e.g. for the 2020 the RES generation covers 38% of the European demand) requires significant back-up capacity, in which gas generation may play a key role.

Besides the collaboration on the development plans, ENTSO-E and ENTSOG also exchanged experience and information on the development of the Cost and Benefit Analysis methodology. This new task stems from the European Regulation on Guidelines for trans-European energy infrastructure which has been adopted on 21 March 2013. This requires both ENTSOs to draft CBA methodologies for a harmonized energy cost-benefit analysis at Union-wide level for all the Projects of Common Interest, as a part of the TYNDP. This task is expected to be fulfilled during 2013, within six months after the above mentioned legislation came into force. On 29 November 2012, ENTSOG attended the ENTSO-E workshop on CBA methodology ('Assessing the future projects of European Interest') and various other interactive sessions on specific topics. The objective of the workshop was to gather initial feedback from stakeholders on the draft CBA methodology. The workshop offered an opportunity to consult relevant stakeholders on common issues related to the CBA methodology.

System Operation

The System Operation Business Area is primarily responsible for the development of the technical Network Codes and currently has two main working groups: Interoperability and Transparency. In addition, the area also handles issues under gas quality, common network operation tools and the technical cooperation with third country TSOs.

INTEROPERABILITY NETWORK CODE

Operational, technical, communication and business interoperability is a prerequisite for the proper functioning and integration of the gas market. In the gas transmission services, interoperability can be seen as a set of technical and operational rules that enhance cooperation among system operators and network users, thus facilitating the exchange of gas across networks.

On 31 January 2012, the European Commission invited ACER to start developing a framework guideline (FG) on interoperability rules for gas, to be submitted within six months. The FG was also to address the data exchange topic. On 26 July, ACER published and submitted the FG for Interoperability and Data Exchange Rules to the EC, and on 17 October the organization published the initial impact assessment accompanying the FG.

The topics identified by ACER to be tackled by the future Network Code were:

- ▲ Interconnection agreements
- ▲ Units
- ▲ Gas quality
- ▲ Odorization
- ▲ Data exchange
- ▲ Capacity calculation

On 11 September 2012, ENTSOG was in turn invited to draft a Network Code in line with the framework guidelines and the impact assessment. It was defined that the Network Code

should cover the areas of Interconnection Agreement, Units, Gas Quality (aspects not directly dealt with in the context of CEN mandate M/400), Odorization and Data Exchange, while for the topic of Capacity Calculation the Commission preferred to make use of its right of proposal to put forward a text for comitology in this regard (together with the CAM Network Code).

Just two days later, ENTSOG published a draft project plan with a one-month consultation period, in order to explain its details and seek feedback on the key milestones of the development process of the Network Code, stressing the importance of the participation and the commitment from relevant stakeholders. The kick-off workshop on 26 September 2012 was attended by almost 80 participants, and eight stakeholders presented their initial views. TSOs from third countries were also invited and participated in the workshop.

On 2 October, the Network Code development process and initial key messages on content issues were presented in the 22nd Madrid Forum, where participating stakeholders expressed similar views. Eight days later, a Launch Documentation was published with an overview of the framework guidelines, ENTSOG's initial views, policy options and questions for Stakeholders' input.

On 10 October, the Launch Documentation was published with an overview of the framework guidelines, ENTSOG's initial views, policy options and questions for Stakeholders' input. The Launch Documentation was a source of inspiration for the external Stakeholders to prepare the interactive Network Code drafting process.

The Interoperability Network Code project team followed a four-step topic approach to progress to a draft Network Code:

- ▲ Topic exploration
- ▲ Draft Business Rules
- ▲ Refined Business Rules
- ▲ Draft code text (in cooperation with the Legal Adviser)

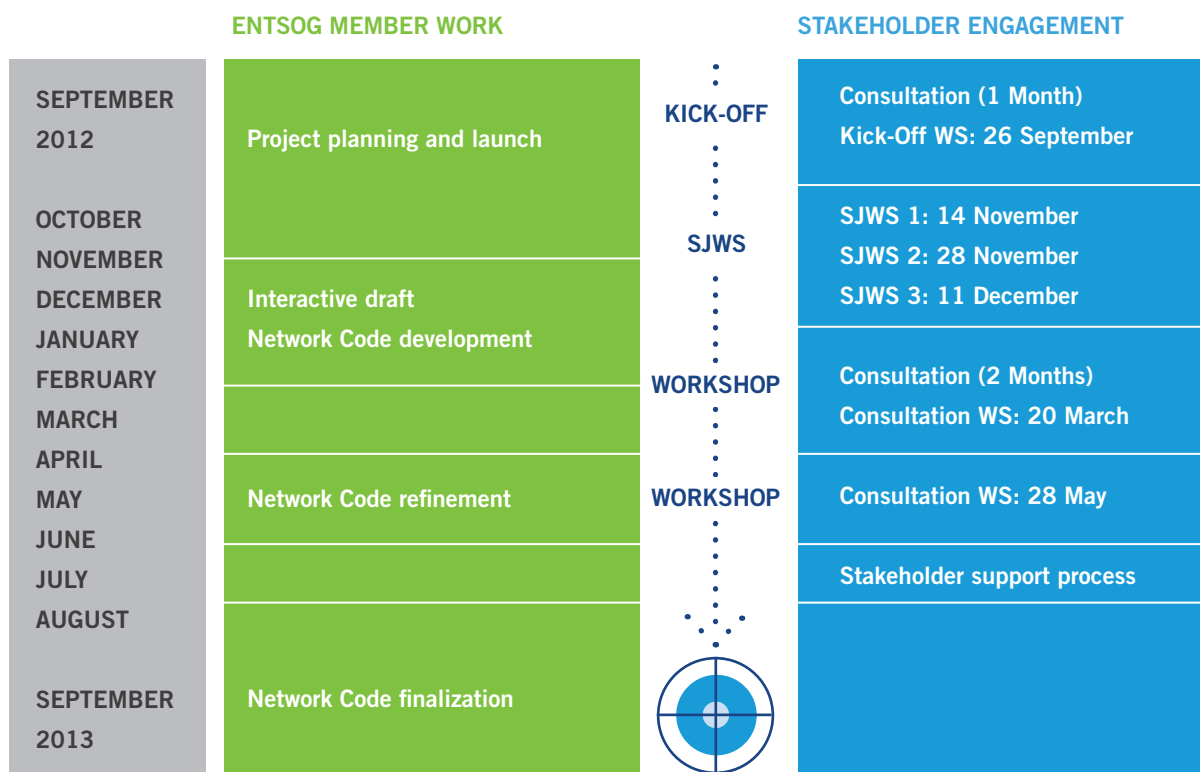
For the development and refinement of the Business Rules, the team organized:

- ▲ Three Stakeholder Joint Working Sessions (14 November, 28 November, 11 December)
- ▲ Three meetings with the prime movers (7 November, 20 November, 5 December)
- ▲ Three trilateral meetings with European Commission and ACER to discuss clarifications for framework guideline, impact assessment and Network Code development process (29 October, 30 November, 14 December)

As ENTSOG intended to have increased involvement from stakeholders and full transparency in the process, before and after each meeting, relevant material and notes were published or circulated. As regards the preparation and

delivery of materials for the above activities, there has been strong contribution from the relevant expert Kernel Groups (KGs) and Interoperability Working Group. The picture below describes the timelines for each phase of the project.

NETWORK CODE DEVELOPMENT PROCESS: PROJECT TIMELINES



TRANSPARENCY

Enhanced transparency regarding the activities of TSOs in Europe is important for a well-functioning internal gas market. Regulation (EC) 715/2009 sets the basic transparency rules, which are further specified in Chapter 3 of Annex I.

ENTSOG's Transparency Working Group organized monthly discussions among the members. One of the main topics was the Regulation on Energy Market Integrity and Transparency (REMIT), which concerns all European players in the gas and electricity market. The Regulation (EC) No 1227/2011 was published on 25 October 2011 followed by additional documents of ACER (Guidance 1 & 2). The group's task was to outline the consequences of the regulation for TSOs and to take respective actions. Therefore, ENTSOG participated in Public Consultations of ACER and the European Commission. In the fourth quarter, ACER published its Recommendations to the Commission on the implementation of REMIT. In parallel, ENTSOG advisors participated on ACER's REMIT IT Expert Group in order to contribute to the development of a reporting standard under REMIT.

As a consequence of the Congestion Management Procedures (CMP, August 2012), ENTSOG launched a project to be compliant by 1 October 2013. As of this date, ENTSOG members will be obliged to publish transparency data as well as data about capacity requests on ENTSOG's Transparency Platform, in addition to the publication on their individual website. The Transparency Working Group is responsible for the new platform which is supposed to significantly increase market transparency by providing data from all European TSOs.

The group collected feedback from our stakeholders during a dedicated workshop and a public consultation, and transformed the formulated needs into functional specifications by focusing on user-friendliness as well as functionality. In addition to the improvement of the Transparency Platform, the Transparency Working Group will also propose a standardized section on the individual website of the TSOs. This section will provide transparency information in a structured, clear and harmonized manner. The implementation on TSO websites is planned to occur during 2013.



System Operation

TRANSPARENCY PLATFORM

The Transparency Platform (www.gas-roads.eu) is a tool developed by TSOs on a voluntary basis and offered to the market. It has 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 Platform is based on information previously published by individual TSOs on their websites.

An important feature is that the platform offers its users the possibility to search for a route across European gas transmission networks by just selecting the starting and the ending points. A route summary is then generated, providing the users an overview of the available monthly capacity along the route and other useful information such as available contracts, applicable tariffs, balancing rules, capacity allocation mechanisms as well as dynamic data such as flows, nominations, renominations and interruptions. In addition, the platform publishes links to individual TSO websites dedicated to third party access information, which makes it a useful navigation tool for gas network users.

Furthermore, two new tools were introduced. The first one provides the users with easy access to available commercial information for the transmission system through an interactive geographical map. The second one is an Automatic Download Tool, which offers a quick and reliable way for transferring TSOs' uploaded data from ENTSOG's Transparency Platform directly to the stakeholders' database. Information is made available in three different XML file types per TSO (static, historical and dynamic data). Registered users receive a notification after the latest upload by an RSS feed, in order to start the download via a direct server to server connection. A manual download is of course available as well.

Thanks to all these features, the Platform has proved to be a very useful tool not only to network users, but also to other stakeholders.

GAS QUALITY

Differences in gas quality specifications between operating systems can be a barrier for free gas flow in the internal market. Therefore, the idea of harmonizing specifications was widely explored by different groups over the past years. ENTSOG, calling on the experience of its members, tries to participate and actively contribute to the relevant activities.

Gas Quality Kernel Group members have monitored the gas quality standardization work by CEN (CEN Mandate M/400 for natural gas quality standard and CEN Mandate M/475 for bio methane standard). They have also participated in the coordination group of the EU gas quality harmonization implementation pilot project, led by EASEE-gas and Marcogaz.

the interoperability and data exchange rules Network Code that is still under development, ENTSOG has already started working on additional necessary tools, such as:

- ▶ the Harmonization of Maintenance Publication, with the intention to improve the level of information provided to the market (final proposal for a common maintenance publication format is ready, the members are progressively implementing it) and
- ▶ the Business Requirements Specification for the auctioning process, in cooperation with Capacity Working Group, as described in the delivered CAM Network Code, being a first step towards the development of the necessary messages for data exchange purposes

COMMON NETWORK OPERATION TOOLS

According to Regulation (EC) 715/2009, ENTSOG has to adopt common network operation tools to ensure the coordination of network operations in normal and emergency conditions, including a common incidents classification scale and research plans.

The tools are intended to increase cooperation between adjacent transmission system operators. Even though the tools that need to be harmonized are only to be included in

TECHNICAL COOPERATION WITH THIRD-COUNTRY TSOs

According to Regulation (EC) 715/2009, ENTSOG has to adopt recommendations relating to the coordination of the technical cooperation between Community and third-country transmission system operators.

Third-country TSOs have been invited and are participating in the development of Interoperability and data exchange rules Network Code.

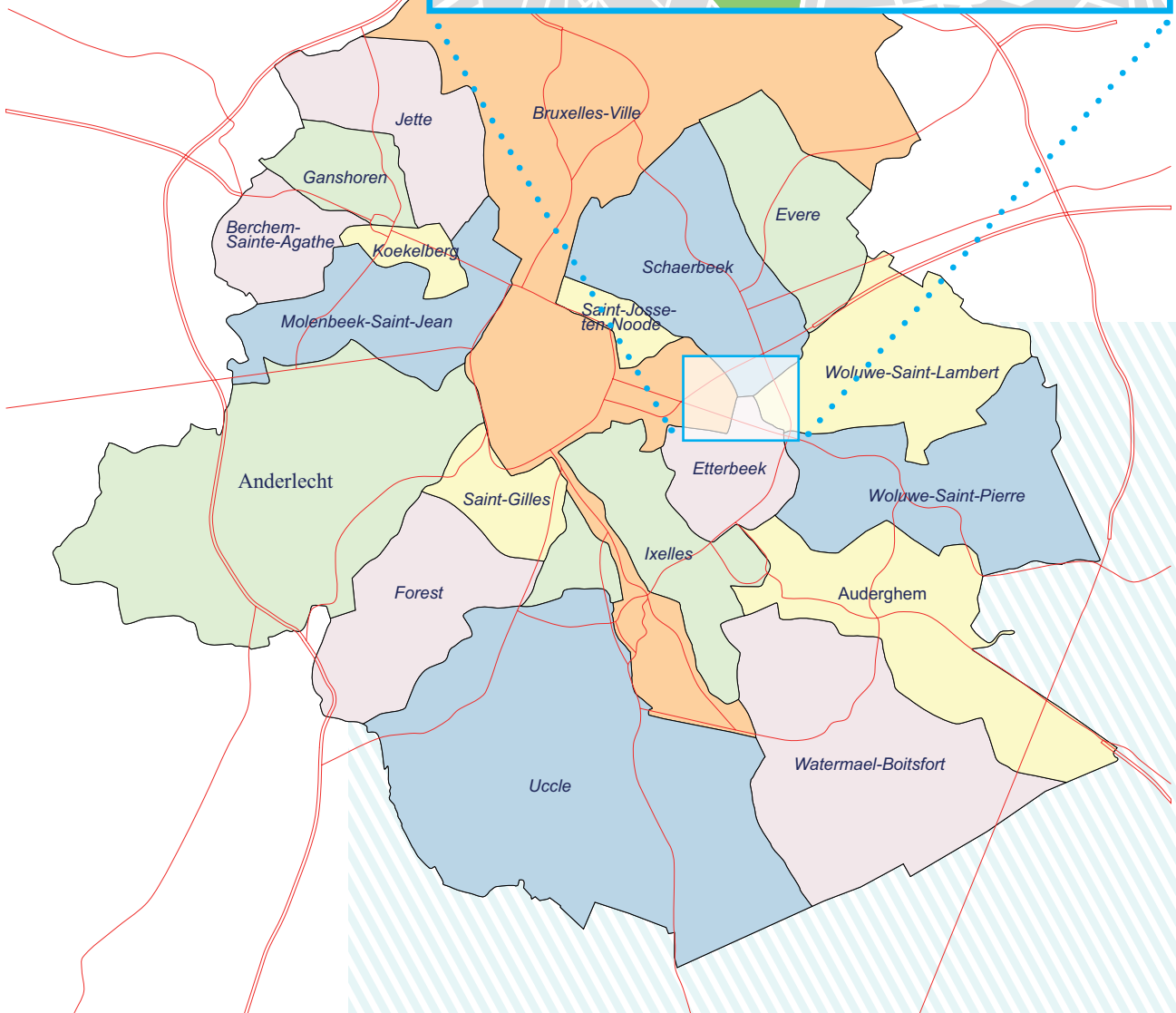


Chapter 4

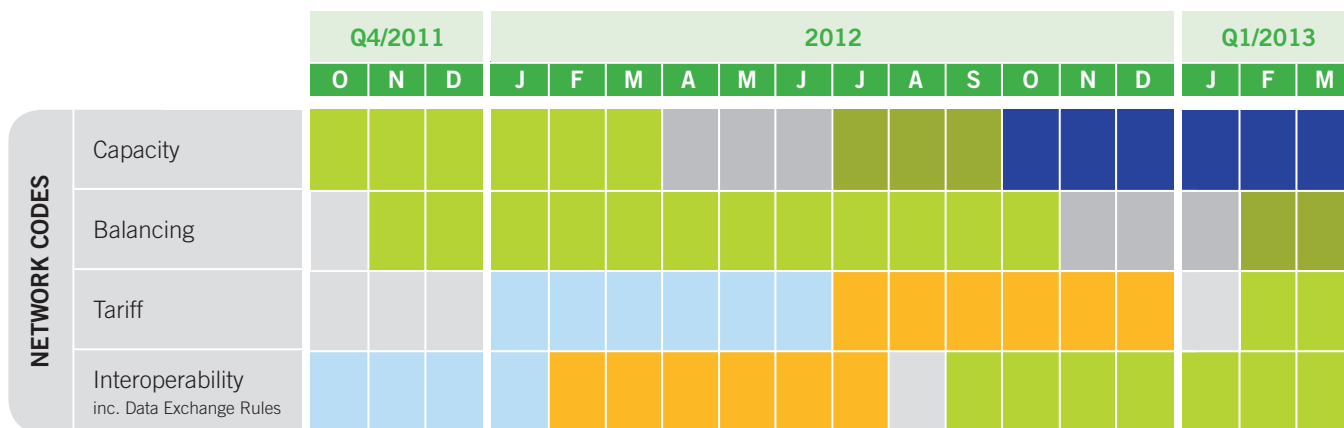
**ENTSOG Timelines / ENTSOG Members / ENTSOG Team
Assembly & Board Decisions / Financial Statements / Position Papers / Press Releases
Stakeholder Consultation & Workshops / Transmission Capacity Map / Abbreviations**



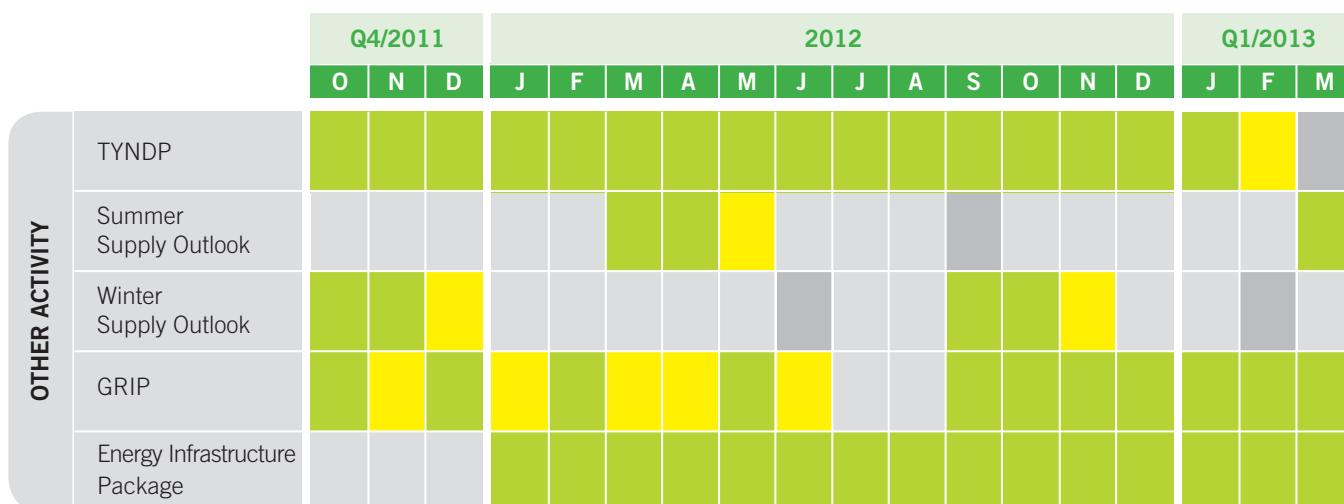
ENTSOG in Brussels



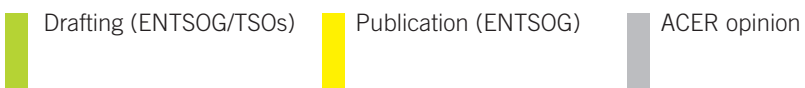
ENTSOG Timelines 2012



NETWORK CODES



OTHER ACTIVITY



ENTSO-G Members status 01.01.2013

ASSOCIATED PARTNERS (3)

Estonia	▲	EG Võrguteenus
Latvia	▲	Latvijas Gaze
Lithuania	▲	Lietuvos Dujos

OBSERVERS (4)

Croatia	▲	Plinacro
Macedonia (FYROM)	▲	GA-MA AD Skopje
Norway	▲	Gassco
Switzerland	▲	Swissgas

<http://www.entsog.eu/members>



TRANSMISSION SYSTEM OPERATORS (41)



Austria	<ul style="list-style-type: none"> ▲ Baumgarten-Oberkappel Gasleitung ▲ Gas Connect Austria ▲ Trans Austria Gasleitung
Belgium	<ul style="list-style-type: none"> ▲ Fluxys Belgium
Bulgaria	<ul style="list-style-type: none"> ▲ Bulgartransgaz
Czech Republic	<ul style="list-style-type: none"> ▲ NET4GAS
Denmark	<ul style="list-style-type: none"> ▲ Energinet.dk
Finland	<ul style="list-style-type: none"> ▲ Gasum
France	<ul style="list-style-type: none"> ▲ GRTgaz ▲ TIGF
Germany	<ul style="list-style-type: none"> ▲ bayernets ▲ Fluxys TENP ▲ Gastransport Nord ▲ GASCADE Gastransport ▲ Gasunie Deutschland Transport Services ▲ Terranets bw ▲ GRTgaz Deutschland Transport Services ▲ NEL Gastransport ▲ Nowega ▲ Ontras-VNG Gastransport ▲ Open Grid Europe ▲ Jordgas Transport ▲ Thyssengas
Greece	<ul style="list-style-type: none"> ▲ DESFA
Hungary	<ul style="list-style-type: none"> ▲ FGSZ Naturel Gas Transmission
Ireland	<ul style="list-style-type: none"> ▲ Gaslink Independent System Operator
Italy	<ul style="list-style-type: none"> ▲ Infrastrutture Trasporto Gas ▲ Snam Rete Gas
Luxembourg	<ul style="list-style-type: none"> ▲ Creos Luxembourg
Netherlands	<ul style="list-style-type: none"> ▲ Gasunie Transport Services
Poland	<ul style="list-style-type: none"> ▲ Gas Transmission Operator GAZ-SYSTEM
Portugal	<ul style="list-style-type: none"> ▲ REN-Gasodutos
Romania	<ul style="list-style-type: none"> ▲ Transgaz
Slovak Republic	<ul style="list-style-type: none"> ▲ eustream
Slovenia	<ul style="list-style-type: none"> ▲ PLINOVODI
Spain	<ul style="list-style-type: none"> ▲ Enagás
Sweden	<ul style="list-style-type: none"> ▲ Svenska Kraftnat ▲ Swedegas
United Kingdom	<ul style="list-style-type: none"> ▲ Interconnector (UK) ▲ National Grid Gas ▲ Premier Transmission

ENTSOG Team



GENERAL MANAGER
Vittorio Musazzi



MARKET MANAGER

Nigel Sisman



**SYSTEM DEVELOPMENT
MANAGER**

Andrea Čirličová



**SYSTEM OPERATION
MANAGER**

Panagiotis Panousos



Management support team

From left to right:

- Mirsada Spaho
- Licia Aversano
- Vittorio Musazzi
- Drika Boone
- Armin Teichert
- Cécile Marchi
- Agata Musial
- Maria Dhénin
- Alexandra Kiss
- Nikolay Markovski



Market team

From left to right:
 Ruud van der Meer
 Alexandra Kiss
 Heather Glass
 Nigel Sisman
 Victoria Gerus
 Frederik Thure
 Ann-Marie Colbert
 Noel Regan
 Violeta Bescós
 Irina Oshchepkova



System Development team

From left to right:
 Carmen Rodríguez
 Martina Firtik
 Vincent Scherrer
 Mirsada Spaho
 Olivier Leboi
 Andrea Čirlićová
 Adela Comanita
 Irma Vasanyte
 Ádám Balogh



System Operation team

From left to right:
 Mirsada Spaho
 Hendrik Pollex
 Monika Kaldonek
 Michel Van den Brande
 Martin Reisner
 Panagiotis Panousos
 Jef De Keyser



Board decision on the financial statements



Board Meeting – Decisions taken
BOA0277-13_Rev_0
March 20th 2013
ADOPTED

Decisions taken during the forty-first Board Meeting

Brussels, March 20th 2013

Decision n°1

ENTSOG Board approved the attendance of A. Musial for points 4 and 5 of the agenda and of Mr V. Scherrer for point 6.

Decision n°2

ENTSOG Board approved the financial closure of year 2012 as recommended by Financial Committee and asked General Manager to submit the approved document to General Assembly for final approval on May 22nd 2013.

Decision n°3

ENTSOG Board decided to apply the indexation to the seconded fees contracts on an annual basis. Board asked to Financial Committee to define which between the possible European indexes could better reflect the need of indexation of contracts and to define it in an internal procedure. Board asked therefore to General Manager to submit the proposal to General Assembly together with the preparation of the next Budget 2014.

Decision n°4

ENTSOG Board, having heard the presentation of Mr. V. Scherrer on the comparison between Net4Gas request and what implemented in the RFP, taking into account the fact that it is necessary to report to General Assembly on May 22nd on the first economical results in order to allow the General Assembly to take eventually the final investment decision on the project, discussed the IT project and the proposals from Net4Gas for a clear description of the reason and the purpose of the data collection, acknowledged the need of data governance to be fix during the IT project and decided to go along with the new tender starting from today.

Brussels, 20 March 2013



ENTSOG financial statements 2012

The Financial Statement will be approved by the General Assembly in Venice on 22 May 2013

ENTSOG AISBL

Folder Nr.	ENTSOG
27/02/2013	5:59
Page Nr.	1

Balance sheet synoptic ASBL

Values EUR

	Note	2012 2012	2011 2011
ASSETS			
FIXED ASSETS			
	20/28	717,544.16	747,539.20
I. Preliminary expenses			
	20		
II. Intangible assets (exh. I, A)	21	5,055.48	10,679.81
III. Tangible assets (exh. I, B)	22/27	712,488.68	736,859.39
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	227,588.61	201,206.43
1. Belonging fee-simple to the association	241	227,588.61	201,206.43
2. Other	242		
D. Leasings and similar rights			
	25		
E. Other tangible assets			
	26	484,900.07	536,652.96
1. Belonging fee-simple to the association	261	(136,240.70)	(66,967.85)
2. Other	262	621,140.77	602,620.81
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	2,201,654.87	3,012,829.71
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	2915		
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	80,350.05	233,335.60
A. Trade receivables			
	40	3,444.09	140,095.01
B. Other receivables			
	41	76,905.96	93,240.59
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	2,053,122.36	2,681,618.19
X. Accruals	490/1	68,182.46	97,875.92
TOTAL ASSETS		2,919,199.03	3,760,368.91



ENTSOG financial statements 2012

The Financial Statement will be approved by the General Assembly in Venice on 22 May 2013

ENTSOG AISBL

Folder Nr.	ENTSOG
27/02/2013	5:59
Page Nr.	2

Balance sheet synoptic ASBL

Values EUR

	Note	2012 2012	2011 2011
LIABILITIES AND OWNERS' EQUITY			
PARTNERSHIP FUND			
	10/15	2,602,097.34	3,174,248.14
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		
V. Profit carried forward	140	1,982,205.34	2,554,356.14
Loss carried forward (-)	141		
VI. Capital subsidies	15		
PROVISIONS			
	16		
VII. A. Provisions for risks and liabilities (exh. IV)	160/5		
B. Provisions for gifts and bequests with right to repossess (exh. IV)	168		
LIABILITIES			
	17/49	317,101.69	586,120.77
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	254,601.69	562,200.77
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	178,927.38	537,610.64
1. Suppliers	440/4	178,927.38	537,610.64
2. Notes payable	441		
D. Payments on account for orders	46		
E. Taxes, salaries and social liabilities	45	75,674.31	24,590.13
1. Income taxes	450/3	333.70	
2. Payroll and social expenses	454/9	75,340.61	24,590.13
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	62,500.00	23,920.00
TOTAL LIABILITIES AND OWNERS' EQUITY		2,919,199.03	3,760,368.91

ENTSOG AISBL

Folder Nr.	ENTSOG
27/02/2013	5:59
Page Nr.	3

Balance sheet synoptic ASBL

Values EUR

	Note	2012 2012	2011 2011
2. INCOME STATEMENT			
I. Operating revenues and expenses	D		
Sales and services among	70/74	4,315,367.19	4,749,784.00
which Turnover	70	4,233,775.33	4,625,614.12
which Fees, donations, bequests and grants	73		
Procurement, merchandise, miscellaneous goods and services	60/61	(4,090,328.36)	(2,687,386.69)
A.B. Gross operating margin (positive balance)	70/61	225,038.83	2,062,397.31
Gross operating margin (negative balance) (-)	61/70		
C. Salaries, wages, social expenses and pensions (exh. VI, 2) (-)	62	(660,174.90)	(228,593.54)
D. Depreciations and amounts written down on preliminary expenses, tangible and intangible assets	630	(140,931.54)	(122,796.00)
E. Amounts written down on stock, orders in progress and on trade debts (allowance +, reversal -)	631/4		(38.22)
F. Provisions for risks and liabilities (allowance +, application and reversal -)	635/8		
G. Other operating expenses (-)	640/8	(2,668.07)	(1,340.30)
H. Operating expenses for restructuring (+)	649		
Operating profit (+)	70/64		1,709,629.25
Operating loss (-)	64/70	(578,735.68)	
II. Financial revenues	75	11,269.35	19,103.47
Financial expenses (-)	65	(4,684.47)	(3,963.21)
Current profit before tax (+)	70/65		1,724,769.51
Current loss before tax (-)	65/70	(572,150.80)	
III. Extraordinary revenues	76		
Extraordinary expenses (-)	66		
Profit of current accounting year before tax (+)	70/66		1,724,769.51
Loss of current accounting year before tax (-)	66/70	(572,150.80)	

Position Papers

2012

Incremental Capacity paper released for circulation during the Autumn Madrid Forum: ENTSOG delivered a paper on the allocation of incremental capacity to all participants of the October Madrid Forum. The paper provided a framework for the discussion on how a market test could be constructed and it encouraged a constructive debate on a rather complex subject.

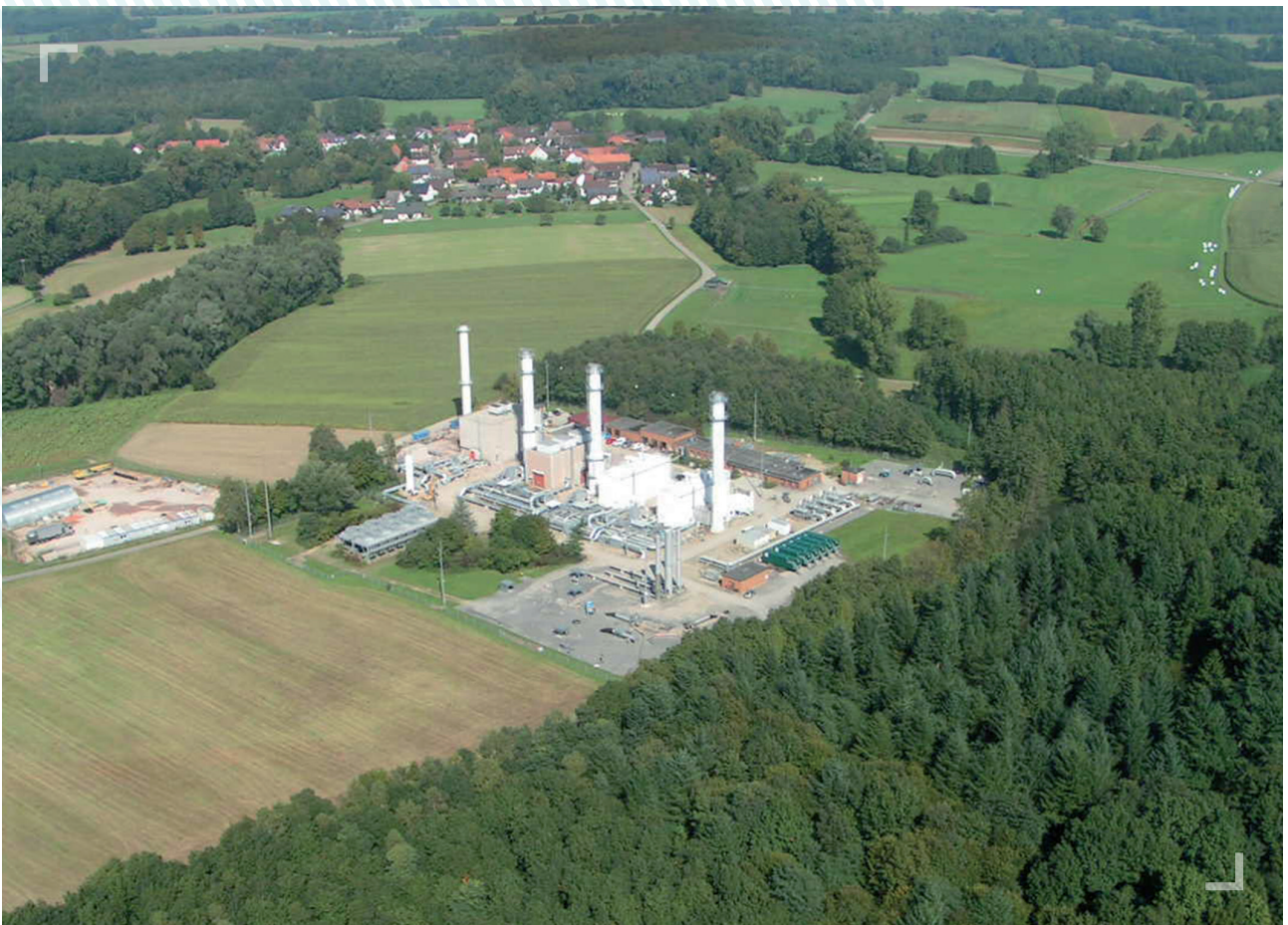


Image courtesy of Fluxys Tsep



Press Releases

2012

30 JANUARY	Gas Transmission System Operators from Central Eastern Europe adopt their Gas Regional Investment Plan 2012-2021
31 JANUARY	European Network of Transmission System Operators for Gas (ENTSOG) makes available an automatic download tool for gas transparency data - Results from 5th Transparency Workshop
15 FEBRUARY	European Network of Transmission System Operators for Gas (ENTSOG) launches a new initiative as part of its Ten-Year Network Development Plan process
6 MARCH	ENTSOG submits the first Network Code on Capacity Allocation Mechanism to ACER
29 MARCH	Gas Transmission System Operators from the BEMIP region adopt their Gas Regional Investment Plan 2012-2021
4 APRIL	Gas Transmission System Operators from Southern Corridor adopt their Gas Regional Investment Plan 2012-2021
24 MAY	European Network of Transmission System Operators for Gas (ENTSOG) adopts Summer Supply Outlook 2012 and Summer 2011 Review
4 JUNE	Developing the integrated European Gas Market: FluxSwiss, Fluxys TENP, GRTgaz, GRTgaz Deutschland, Open Grid Europe, Snam Rete Gas and Swissgas publish their first Gas Regional Investment Plan
27 JUNE	European Network of Transmission System Operators for Gas (ENTSOG) has presented the methodology for its TYNDP 2013-2022 and launches the call for information on projects to be covered in the report
22 AUGUST	European Network of Transmission System Operators for Gas (ENTSOG) launches a public consultation on its Annual Work Programme (AWP) 2013
13 SEPTEMBER	ENTSOG starts the development of a Network Code for Interoperability and Data Exchange Rules - Stakeholder participation essential - Launch Public Consultation draft Project Plan
8 OCTOBER	European Network of Transmission System Operators for Gas in cooperation with Gas Infrastructure Europe launches the System Development Map edition
9 OCTOBER	European Network of Transmission System Operators for Gas (ENTSOG) launches its Annual Report 2011
10 OCTOBER	ENTSOG publishes Launch Documentation for the development of a Network Code on Interoperability and Data Exchange Rules
8 NOVEMBER	European Network of Transmission System Operators for Gas (ENTSOG) adopts the Winter Supply Outlook 2012-13 and Winter 2011-12 Review
13 DECEMBER	Election of the ENTSOG Board for the term 1 January 2013-31 December 2015



Stakeholder consultations & workshops

STAKEHOLDERS CONSULTATION

INTEROPERABILITY

13 SEPTEMBER Interoperability and Data Exchange Rules Network Code: Launch Public Consultation draft Project Plan

CAPACITY ALLOCATION MECHANISM

30 JANUARY - 13 FEBRUARY Stakeholder Support Consultation Process

27 JULY - 10 AUGUST Stakeholder Engagement Process on proposed revisions to the CAM Network Code

BALANCING

13 APRIL - 12 JUNE Balancing Network Code: Main Consultation process

14 - 28 SEPTEMBER Balancing Network Code: Stakeholder Support Consultation process



Image courtesy of Lietuvos Dujos

STAKEHOLDER SESSIONS/WORKSHOPS

TYNDP

24 JANUARY	TYNDP 2013-2022: 1 st Stakeholder Joint Working Session
15 FEBRUARY	TYNDP 2013-2022: 2 nd Stakeholder Joint Working Session
8 MARCH	TYNDP 2013-2022: 3 rd Stakeholder Joint Working Session
20 MARCH	TYNDP 2013-2022: 4 th Stakeholder Joint Working Session
28-29 MARCH	TYNDP 2011-2020: Energy Community Road show
20 APRIL	TYNDP 2013-2022: 5 th Stakeholder Joint Working Session
26 APRIL	TYNDP 2013-2022: 6 th Stakeholder Joint Working Session
29 MAY	TYNDP 2013-2022: 7 th Stakeholder Joint Working Session
20 JUNE	TYNDP 2013-2022: 5 th Workshop
15 NOVEMBER	TYNDP 2013-2022: 6 th Workshop

INTEROPERABILITY

26 SEPTEMBER	Interoperability and Data Exchange Rules Network Code: Kick-off Workshop
14 NOVEMBER	Interoperability and Data Exchange Rules Network Code: 1st Stakeholder Joint Working Session
28 NOVEMBER	Interoperability and Data Exchange Rules Network Code: 2nd Stakeholder Joint Working Session
11 DECEMBER	Interoperability and Data Exchange Rules Network Code: 3rd Stakeholder Joint Working Session

TRANSPARENCY

11 SEPTEMBER	6th Transparency Workshop
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CAPACITY ALLOCATION MECHANISM

31 JANUARY	Capacity Allocation Mechanisms Network Code: Stakeholder Support Workshop
6 MARCH	Evening Event for submission of the CAM Network Code
7 AUGUST	Stakeholder session on proposed revisions to the CAM Network Code

BALANCING

17 JANUARY	Balancing Network Code: 1 st Stakeholder Joint Working Session
26 JANUARY	Balancing Network Code: 2 nd Stakeholder Joint Working Session
9 FEBRUARY	Balancing Network Code: 3 rd Stakeholder Joint Working Session
23 FEBRUARY	Balancing Network Code: 4 th Stakeholder Joint Working Session
26 MARCH	Balancing Network Code: 5 th Stakeholder Joint Working Session
18 APRIL	Balancing Network Code: CEEC Road show
9 MAY	Balancing Network Code: Consultation Workshop
26 JULY	Balancing Network Code: Refinement Workshop
3 AUGUST	Balancing Network Code: Refinement Workshop



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THE EUROPEAN NATURAL GAS NETWORK

CAPACITIES AT CROSS-BORDER POINTS ON THE PRIMARY MARKET

All data relating to projects indicated on this Map is based on ENTSOG TYNP 2011-2020 and Gas Regional Investment Plans (GRIPs 2011-2020 / 2012-2021). All data provided on this map is for information purposes and shall be treated as indicative only. Under no circumstances shall it be regarded as data intended for commercial use.

Capacity data provided reflects situation at 1 July 2012. Current capacity data can be found at www.gas-roads.eu

ENTSOG currently comprises 39 members and 2 Associated Partners from 24 EU countries, and 3 Observers from 3 non-EU countries.

MEMBERS		
AUSTRIA		
BELGIUM		
BULGARIA		
CZECH REP.		
DENMARK		
FINLAND		
FRANCE		
GERMANY		
GREECE		
HUNGARY		
IRELAND		
ITALY		
LUXEMBURG		
THE NETHERLANDS		
POLAND		
PORTUGAL		
ROMANIA		
SLOVAK REPUBLIC		
SLOVENIA		
SPAIN		
SWEDEN		
UNITED KINGDOM		
ASSOCIATED PARTNERS		
LATVIA		
LITHUANIA		
OBSERVERS		
CROATIA		
NORWAY		
SWITZERLAND		

KEYS	
	Virtual Trading Points
	Intercountry or intra balancing zone points
	Cross border interconnection point within EU and with non EU third country (export)
	Cross border EU or non EU export Under construction or Planned
	Cross border interconnection point with non EU third country (import)
	Cross border non-EU import Under construction or Planned
	LNG Terminal entry point into transmission system
	LNG Import Terminal Under construction or Planned
	LNG Export Terminal Under construction or Planned
	Small scale LNG liquefaction plant
	Small scale LNG liquefaction plant Under construction or Planned
	Non-EU Cross-border interconnection point

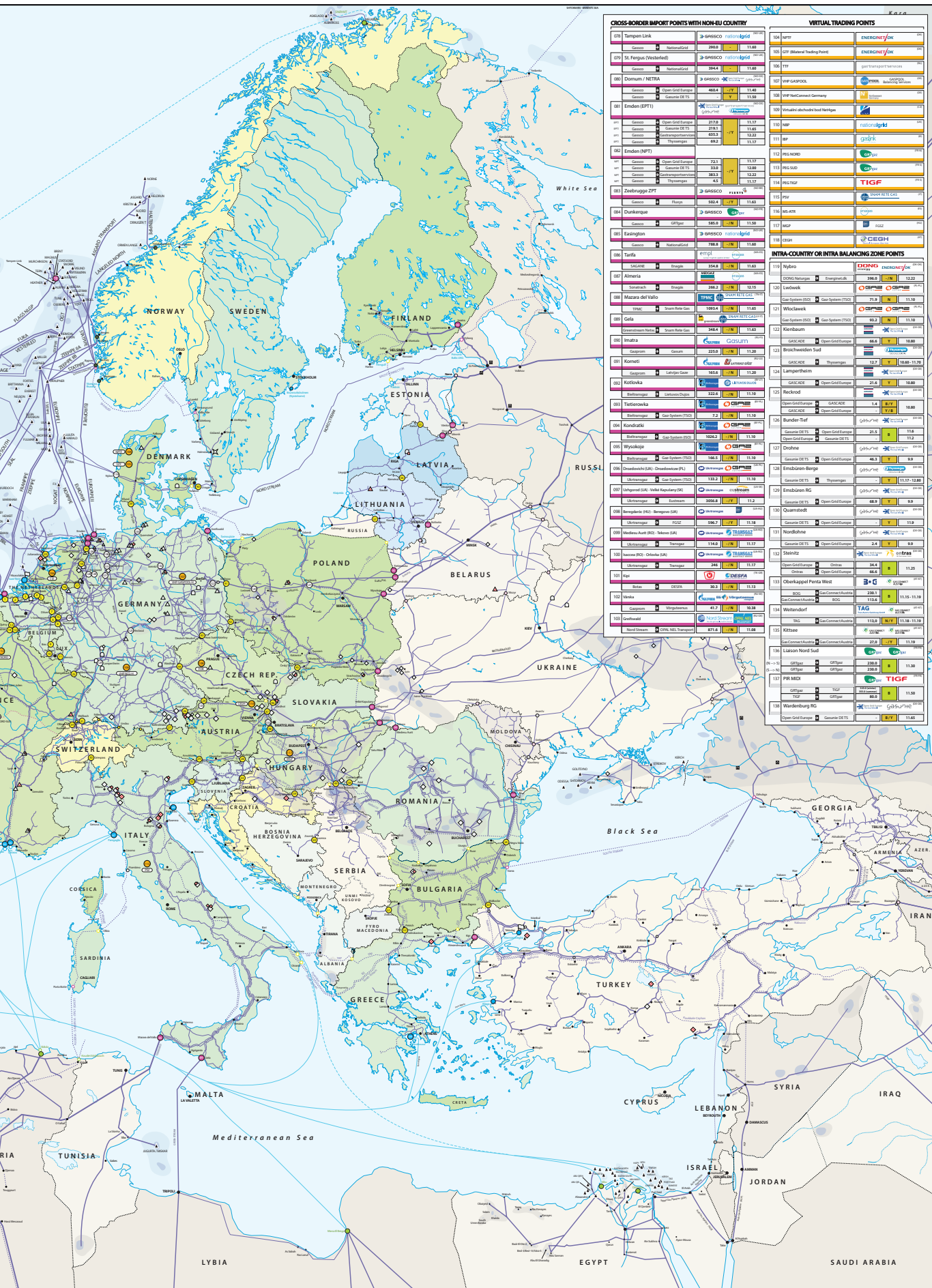
#	Location	System Operators	Assumed GTV for conversion to the 1st TSO reference combination temperature 25C
020	Ferrelas (PT) / Avonmouth (UK)	ENTSOB / TAG	1138.0
	Stream Meth Gas	TAIG	1138.0
	Stream Meth Gas	TAIG	1138.0
	Stream Meth Gas	TAIG	1138.0

Countries		Gas Reserve areas	
	ENTSOG Member Countries		gas field
	ENTSOG Associated Partner		drilling platform
	ENTSOG Observers		LNG Peak Shaving
	Other Countries		Acquirer
			Salt cavity - cavern
			Deployed (Gas) field on shore / offshore
			Other type
			Unknown
			Gas storage project
			Gas storage facilities in non-ENTSOG Member countries

scale = 1:8.000.000 Map version: May 2012

CROSS-BORDER INTERCONNECTION POINTS WITHIN EU			
001	Zeebrugge (Z) / HUB	ENTSOG / TAG	1150 - 1148
002	Zeebrugge (Z) / HUB	ENTSOG / TAG	1150 - 1148
003	Vaencia de Minho (PT) / Flog (ES)	ENGIN / ENGIN	1130
004	Barajas (ES) / Campo Mayor (PT)	ENGIN / ENGIN	1130
005	Estad	ENTSOB / ENGIN	1130
006	Waldhaus	ENTSOB / ENGIN	1130
007	Waldhaus	ENTSOB / ENGIN	1130
008	Waldhaus	ENTSOB / ENGIN	1130
009	Waldhaus	ENTSOB / ENGIN	1130
010	Waldhaus	ENTSOB / ENGIN	1130
011	Waldhaus	ENTSOB / ENGIN	1130
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087	Waldhaus	ENTSOB / ENGIN	1130
088	Waldhaus	ENTSOB / ENGIN	1130
089	Waldhaus	ENTSOB / ENGIN	1130
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091	Waldhaus	ENTSOB / ENGIN	1130
092	Waldhaus	ENTSOB / ENGIN	1130
093	Waldhaus	ENTSOB / ENGIN	1130
094	Waldhaus	ENTSOB / ENGIN	1130
095	Waldhaus	ENTSOB / ENGIN	1130
096	Waldhaus	ENTSOB / ENGIN	1130
097	Waldhaus	ENTSOB / ENGIN	1130
098	Waldhaus	ENTSOB / ENGIN	1130
099	Waldhaus	ENTSOB / ENGIN	1130
100	Waldhaus	ENTSOB / ENGIN	1130





CROSS-BORDER IMPORT POINTS WITH NON-EU COUNTRY				VIRTUAL TRADING POINTS			
078	Tampere Link	GRSICO	nationalgrid	104	NPT	ENERGINET	energinet
079	St. Fergus (Westford)	GRSICO	nationalgrid	105	OTI (Oldwood Trading Point)	ENERGINET	energinet
080	Dunkirk / NETRA	GRSICO	nationalgrid	106	TT	ENTSO-E	entso-e
081	Emden (EPT1)	GRSICO	nationalgrid	107	WPGASPOOL	ENTSO-E	entso-e
082	Emden (NPT)	GRSICO	nationalgrid	108	WPGASPOOL	ENTSO-E	entso-e
083	Zeebrugge ZPF	GRSICO	nationalgrid	109	WPGASPOOL	ENTSO-E	entso-e
084	Dunkirk	GRSICO	nationalgrid	110	NBP	nationalgrid	nationalgrid
085	Easington	GRSICO	nationalgrid	111	NBP	nationalgrid	nationalgrid
086	Tarifa	ENTSO-E	entso-e	112	REC-NODE	ENTSO-E	entso-e
087	Almeria	ENTSO-E	entso-e	113	REC-NODE	ENTSO-E	entso-e
088	Mazara del Vallo	ENTSO-E	entso-e	114	REC-NODE	ENTSO-E	entso-e
089	Gela	ENTSO-E	entso-e	115	REC-NODE	ENTSO-E	entso-e
090	Avulba	ENTSO-E	entso-e	116	REC-NODE	ENTSO-E	entso-e
091	Karant	ENTSO-E	entso-e	117	REC-NODE	ENTSO-E	entso-e
092	Fotofoka	ENTSO-E	entso-e	118	REC-NODE	ENTSO-E	entso-e
093	Tripolitarka	ENTSO-E	entso-e	119	Hydro	ENTSO-E	entso-e
094	Fondarka	ENTSO-E	entso-e	120	LowWeck	ENTSO-E	entso-e
095	Wysokie	ENTSO-E	entso-e	121	Woclawek	ENTSO-E	entso-e
096	Chardonevskij	ENTSO-E	entso-e	122	Kienbaum	ENTSO-E	entso-e
097	Ukrainian-Gas	ENTSO-E	entso-e	123	Brochweiden Sud	ENTSO-E	entso-e
098	Berengeni (PSC)	ENTSO-E	entso-e	124	Lampartsheim	ENTSO-E	entso-e
099	Madrasa Aust (SC)	ENTSO-E	entso-e	125	Reckord	ENTSO-E	entso-e
100	Esja	ENTSO-E	entso-e	126	Bunder Tief	ENTSO-E	entso-e
101	Vaska	ENTSO-E	entso-e	127	Druck	ENTSO-E	entso-e
102	Gratwohl	ENTSO-E	entso-e	128	Embsen-Berge	ENTSO-E	entso-e
103	Gratwohl	ENTSO-E	entso-e	129	Embsen-RC	ENTSO-E	entso-e
104	Kittsee	ENTSO-E	entso-e	130	Quandorf	ENTSO-E	entso-e
105	Liljan Nord Sud	ENTSO-E	entso-e	131	Nordböhne	ENTSO-E	entso-e
106	PR-MEN	ENTSO-E	entso-e	132	Steinitz	ENTSO-E	entso-e
107	Wardenburg BG	ENTSO-E	entso-e	133	Oberrappell Porta West	ENTSO-E	entso-e
108	Wardenburg BG	ENTSO-E	entso-e	134	Waldendorf	ENTSO-E	entso-e
109	Waldenburg BG	ENTSO-E	entso-e	135	Kittsee	ENTSO-E	entso-e
110	Waldenburg BG	ENTSO-E	entso-e	136	Liljan Nord Sud	ENTSO-E	entso-e
111	Waldenburg BG	ENTSO-E	entso-e	137	PR-MEN	ENTSO-E	entso-e
112	Waldenburg BG	ENTSO-E	entso-e	138	Wardenburg BG	ENTSO-E	entso-e

For more details on this map please visit <http://www.entsoe.eu/maps/transmission-capacity-map>



Abbreviations

ACER	Agency for the Cooperation of Energy Regulators
AWP	Annual Work Programme
BCM	Billion cubic metres
CAM NC	Capacity Allocation Mechanism Network Code
CBA	Cost-Benefit Analysis
CEER	Council of European Energy Regulators
CEF	Connecting Europe Facility
CEN	European Committee for Standardization
CMP	Congestion Management Procedures
EC	European Commission
EFTA	European Free Trade Area
EIP	Energy Infrastructure Priorities
ERGEG	European Regulator's Group for Electricity and Gas
ENTSO-E	European Network of Transmission System Operators for Electricity
ENTSO-G	European Network of Transmission System Operators for Gas
EU	European Union
GCG	Gas Coordination Group
GRIP	Gas Regional Investment Plan
GTE	Gas Transmission Europe
KG(s)	Kernel Group(s)
MW	Megawatt
NC	Network Code
PCI	Project of Common Interest
REMIT	Regulation on Energy Market Integrity and Transparency
RES	Renewable Energy Sources
SJWS	Stakeholder Joint Workshops
SoS	Security of Supply
TYNDP	Ten-Year Network Development Plan
TSO	Transmission System Operator
WS(s)	Workshop(s)

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