



European Ten Year Network Development Plan **2010 - 2019**

23 December 2009
Ref. 09ENTSOG02

Attachment B European Peak Day Analysis

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B.1. Overview



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In this Attachment B details of the European peak day analysis are provided. The European peak day analysis was conducted by using the Peak Day Potential Supply Scenario and the ENTSOG Peak Day Demand Scenario as defined in the main document.

In chapter B.2 the determination of the import capacities from Norway which is based on information on the development of exit capacities as received from Gassco and the development of entry capacities as provided by the TSOs connected to the Norwegian export system and further detailed in the respective country-specific chapters of Attachment A is described.

In chapter B.3 the determination of the cross-border capacities between European countries based on the respective exit and entry capacity as received from the European TSOs and further detailed in the respective country-specific chapters of Attachment A is described.

In chapter B.4 a methodology to conduct a European potential supply / demand vs. capacity analysis is described and the resulting usage scenario that has been determined under application of this methodology is given for each country included in the analysis.

A summary of the findings is given in the summary chapter of the main document.

B.2. Development of import capacities from Norway



© Image courtesy of Centrica Storage (Easington)

In this section, the development of import capacities Norway to EU-27 import points is shown. Information provided by Gassco is listed together with the information of the downstream TSO or TSOs at these import points.

The row "Applied" at the end of each table shows the figures that were used in the calculations of the demand vs. capacity calculation. The figures were determined by taking the lesser of the non-confidential figures of the entry and exit capacity figures.

B.2.1 Norway-Belgium: Zeebrugge ZPT

B.2.2 Norway-France: Dunkerque

B.2.3 Norway-Germany: Dornum

B.2.4 Norway-Germany/Netherlands: Emden (NPT & EPT)

B.2.5 Norway-United Kingdom: Easington (Langeled)

B.2.6 Norway-United Kingdom: St Fergus (Vesterled)

B.2.7 Norway-United Kingdom: Tampen Link

B.3 Development of European Internal Cross-Border Capacities



© Image courtesy of OMV Gas

In this section, the information of the respective TSOs on the development of entry and exit capacities at interconnection points within Europe are shown.

The cross-border capacities are not constant amounts over the years, due to several TSO-related reasons:

- A dependency of the overall (and changing) booking situation
 - Changing supply/demand patterns
 - Different regulatory frameworks and/or national legislation
 - Changes in network development regimes

The row "Applied" at the end of each table shows the figures that were used in the potential supply/demand vs. capacity analysis. The figures were determined by taking the lesser of the non-confidential figures of the entry and exit capacity figures. In case there are only non-confidential figures on one side, the sum of the figures on the other side is used.

B.3.1 Austria-Germany: Burghausen/Überackern

B.3.2 Austria-Germany: Oberkappel

		Capacity (Mio. Nm ³ /day)									
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
BOG GmbH	Exit	27	31	31	31	31	31	31	31	31	31
EGT	Entry	1	1	1	2	2	2	2	2	2	2
GRTgazDT	Entry	12	12	12	12	12	12	12	12	12	12
Sum	Entry	13	13	13	14	14	14	14	14	14	14
Applied		13	13	13	14	14	14	14	14	14	14

B.3.3 Austria-Hungary: Mosonmagyarovar

		Capacity (Mio. Nm ³ /day)									
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
OMV Gas GmbH	Exit	14	14	14	14	14	14	14	14	14	14
FGSZ	Entry	12	12	12	12	12	12	12	12	12	12
Applied		12	12	12	12	12	12	12	12	12	12

B.3.4 Austria-Italy: Tarvisio

		Capacity (Mio. Nm ³ /day)									
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TAG GmbH	Exit	105	105	105	105	105	105	105	105	105	105
SRG	Entry	101	101	101	101	101	101	101	101	101	101
Applied		101	101	101	101	101	101	101	101	101	101

In the thermal year 2009/2010 the matching between upstream and downstream capacities at IP is achieved taking into account the interruptible capacities at Tarvisio entry point in Snam Rete Gas Network. This increases the total amount of technical capacity made available for the booking to 105 MNm³/d. The interruptible capacities for the following thermal years can be assumed to be stable, although they will be calculated year by year.

Snam Rete Gas is carrying out the engineering and permits acquisition activities for the projects of reinforcement of the Italian network suitable to increase the firm capacity of Tarvisio entry point in order to match upstream capacities. For these projects Snam Rete Gas will start the construction phase according to the outcomes of open season procedures and the subsequent commitments with the network users.

B.3.5 Austria-Slovakia: Baumgarten

B.3.6 Austria-Slovakia: Petržalka

The pipeline is not finalized/authorized in the Slovak republic, has legal status of emergency pipe. Transformation into operation is currently under planning.

B.3.7 Austria-Slovenia: Murfeld / Ceršak

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
OMV Gas GmbH	Exit	10	10	10	10	10	10	10	10	10	10	
Geoplín	Entry	7	7	8	12	12	19	19	19	23	23	
Applied		7	7	8	10	10	10	10	10	10	10	

B.3.8 Belgium-France: Blaregnies (L) / Taisnières (L)

B.3.9 Belgium-France: Blaregnies (H) / Taisnières (H)

An Open Season is ongoing on that interconnection point (see Att. A.12.4 for details).

B.3.10 Belgium-Germany: Eynatten / Raeren (EGT & Thyssengas & ENI GTD)

		Capacity (Mio. Nm ³ /day)									
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Fluxys	Exit	15	23	23	23	23	23	23	23	23	23
EGT	Entry	10	10	10	18	18	18	18	18	18	18
Thyssengas	Entry	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
ENI GTD	Entry	3	3	3	3	3	3	3	3	3	3
Sum	Entry	13	13	13	21	21	21	21	21	21	21
Applied		13	13	13	21	21	21	21	21	21	21

B.3.11 Belgium-Germany: Eynatten / Raeren (WGT)

B.3.12 Belgium-Luxembourg: CREOS (Bras + Pétange)

B.3.13 Belgium-Netherlands: Zelzate (Zebra)

B.3.14 Belgium-Netherlands: Zelzate (GTS)

B.3.15 Belgium-United Kingdom: Bacton

B.3.16 Belgium-United Kingdom: Zeebrugge IZT

B.3.17 Bulgaria-Greece: Sidirokastron (frm. Kula)

B.3.18 Bulgaria-Greece: Interconnector

B..3.19 Bulgaria-FYROM: Zidilovo

B.3.20 Czech Republic-Germany: Hora Svaté Kateriny / Deutschneudorf

B.3.21 Czech Republic-Germany: Hora Svaté Kateriny / Olbernhau

B.3.22 Czech Republic-Germany: Waidhaus

B.3.23 Czech Republic-Poland: Cieszyn

B.3.24 Czech Republic-Slovakia: Lanžhot

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
RWE TGN	Exit	33	33	33	33	33	33	33	33	33	33	
eustream	Entry	9	9	9	9	9	9	9	9	9	9	
Applied		9	9	9	9	9	9	9	9	9	9	

B.3.25 Denmark-Germany: Ellund

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Energinet.dk	Exit	8	8	8	8	8	8	8	8	8	8	
DEP	Entry	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	
EGT	Entry	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	
GuD	Entry	2	2	2	2	2	2	2	2	2	2	
Sum	Entry	3	3	3	3	3	3	3	3	3	3	
Applied		3	3	3	3	3	3	3	3	3	3	

Note: Open Seasons are conducted in the Danish and German transmission systems to determine capacity expansion in Ellund IP. New capacity is expected to be released from year 2014.

B.3.26 Denmark-Sweden: Dragør

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Energinet.dk	Exit	8	8	8	8	8	8	8	8	8	8	
Swedegas	Entry	8	8	8	8	8	8	8	8	8	8	
Applied		8	8	8	8	8	8	8	8	8	8	

Note: During 2009, Open Season in the Danish transmission system is determining capacity expansion in Dragør IP. It is expected that existing capacity in Dragør with matching new capacity in Ellund towards Germany is sufficient to service the Swedish market.

B.3.27 France GRTgaz-France GRTgaz: Link BZ N_S

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
GRTgaz	Exit	20	20	20	20	20	20	20	20	20	20	
GRTgaz	Entry	20	20	20	20	20	20	20	20	20	20	

A process of consultation of the stakeholders is ongoing (see Att. A.12.4).

B.3.28 France GRTgaz-France GRTgaz: Link BZ S_N

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
GRTgaz	Exit	10	20	20	20	20	20	20	20	20	20	
GRTgaz	Entry	10	20	20	20	20	20	20	20	20	20	

This increase is the result of a coordinated development of capacity (with TIGF) decided in 2005 (see Att. A.12.3 for details). Moreover, A process of consultation of the stakeholders is ongoing (see Att. A.12.4).

B.3.29 France GRTgaz-France TIGF: IP GRTGaz / TIGF

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
GRTgaz	Exit	28	28	28	28	28	28	28	28	28	28	
TIGF	Entry	28	28	28	28	28	28	28	28	28	28	

This new capacity is the result of a coordinated development of capacity decided in 2005 (see Att. A.12.3 for details).

B.3.30 France TIGF-France GRTgaz: IP GRTGaz / TIGF

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
TIGF	Exit	7	7	7	7	7	7	7	7	7	7	
GRTgaz	Entry	7	7	7	7	7	7	7	7	7	7	

This Coordinated development of capacity has been decided in 2005 (see Att. A.12.3 for details).

B.3.31 France-Spain: Biriou (Irun)

		Capacity (Mio. Nm ³ /day) (summer)									
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TIGF	Exit	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Naturgas*	Entry	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Applied		0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9

* Interconnection with Enagas Spanish network through Naturgas IP

The TSO's have jointly defined the IP Capacity as the **minimum common value** of Exit and Entry capacities at both sides of the border, focusing on the development of a harmonized approach for IP agreements.

This IP connects currently local networks without capacity during winter. With the goal of increasing this capacity, in 2009 a new pipeline on the Spanish side will be in operation, and there are other developments of infrastructures under study on the French side. (Ref. ERGEG SGRI).

B.3.32 France-Spain: Larrau

		Capacity (Mio. Nm ³ /day)									
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
TIGF	Exit	9	9	9	9	9	9	9	9	9	9
Enagas	Entry	9	9	9	9	9	9	9	9	9	9
Applied		9	9	9	9	9	9	9	9	9	9

The TSO's have jointly defined the IP Capacity as the **minimum common value** of Exit and Entry capacities at both sides of the border, focusing on the development of a harmonized approach for IP agreements.

TSO's have identified new infrastructures that eliminate current gaps Entry-Exit, and are working in a coordinate network development. (Ref. ERGEG SGRI).

B.3.33 France-Switzerland: Oltingue

		Capacity (Mio. Nm³/day)									
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
GRTgaz	Exit	20	20	20	20	20	20	20	20	20	20
ENI GTI	Entry	20	20	20	20	20	20	20	20	20	20
Applied		20	20	20	20	20	20	20	20	20	20

Discussions have been opened to develop this capacity.

B.3.34 Germany-Austria: Burghausen / Überackern

		Capacity (Mio. Nm³/day)									
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
bayernets	Exit	No figures received									
WGT	Exit	No figures received									
OMV Gas GmbH	Entry	0	10	10	10	10	10	10	10	10	10
Applied		0	10	10	10	10	10	10	10	10	10

B.3.35 Germany-Austria: Kiefersfelden

		Capacity (Mio. Nm³/day)									
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
bayernets	Exit	No figures received									
OMV Gas GmbH	Entry	2	2	2	2	2	2	2	2	2	2
Applied		2	2	2	2	2	2	2	2	2	2

B.3.36 Germany-Austria: Oberkappel

		Capacity (Mio. Nm³/day)									
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
EGT	Exit	6	6	6	16	16	16	16	16	16	16
GRTgazDT	Exit	1	1	1	1	1	1	1	1	1	1
Sum	Exit	7	7	7	17	17	17	17	17	17	17
BOG GmbH	Entry	23	23	23	23	23	23	23	23	23	23
Applied		7	7	7	17	17	17	17	17	17	17

B.3.37 Germany-Belgium: Eynatten / Raeren (EGT & ENI GTD)

		Capacity (Mio. Nm ³ /day)									
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
EGT	Exit	21	21	21	28	28	28	28	28	28	28
ENI GTD	Exit	7	7	7	7	7	7	7	7	7	7
Sum	Exit	28	28	28	35	35	35	35	35	35	35
Fluxys	Entry	20	30	30	30	30	30	30	30	30	30
Applied		20	28	28	30	30	30	30	30	30	30

B.3.38 Germany-Belgium: Eynatten / Raeren (WGT)

B.3.39 Germany-Czech Republic: Hora Svaté Kateriny / Deutschneudorf

B.3.40 Germany-Czech Republic: Olbernhau

B.3.41 Germany-Czech Republic: Waidhaus

		Capacity (Mio. Nm³/day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
EGT	Exit	No figures received										
GRTgazDT	Exit	No figures received										
RWE TGN	Entry	22	22	22	22	22	22	22	22	22	22	
Applied		0	0	0	0	0	0	0	0	0	0	

B.3.42 Germany-France: Medelsheim / Obergailbach

		Capacity (Mio. Nm³/day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
EGT	Exit	10	10	10	10	10	10	10	10	10	10	
GRTgazDT	Exit	49	49	49	49	49	49	49	49	49	49	
Sum	Exit	59	59	59	59	59	59	59	59	59	59	
GRTgaz	Entry	56	56	56	56	56	56	56	56	56	56	
Applied		56	56	56	56	56	56	56	56	56	56	

B.3.43 Germany-Luxembourg: Remich

		Capacity (Mio. Nm³/day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
EGT	Exit	3	3	3	3	3	3	3	3	3	3	
CREOS	Entry	4	4	4	4	4	4	4	4	4	4	
Applied		3	3	3	3	3	3	3	3	3	3	

B.3.44 Germany-Netherlands: Bunde - Oude Statenijl H-gas (EGT 1)

		Capacity (Mio. Nm³/day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
EGT	Exit	19	19	19	21	21	21	21	21	21	21	
GTS	Entry	20	24	31	36	36	36	36	36	36	36	
Applied		19	19	19	21	21	21	21	21	21	21	

B.3.45 Germany-Netherlands: Bunde - Oude Statenzijl H-gas (EGT 2 / Renato)

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
EGT	Exit	13	13	13	13	13	13	13	13	13	13	
GTS	Entry				Confidential							
Applied		13	13	13	13	13	13	13	13	13	13	

B.3.46 Germany-Netherlands: Bunde - Oude Statenzijl H-gas (GuD)

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
GuD	Exit	2	2	2	2	2	2	2	2	2	2	
GTS	Entry	3	3	5	5	5	5	5	5	5	5	
Applied		2	2	2	2	2	2	2	2	2	2	

B.3.47 Germany-Netherlands: Bunde - Oude Statenzijl H-gas (WGT)

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
WGT	Exit	3	3	4	4	4	4	4	4	4	4	
GTS	Entry	3	4	7	7	7	7	7	7	7	7	
Applied		3	3	4	4	4	4	4	4	4	4	

B.3.48 Germany-Poland: Lasów

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Ontras	Exit	3	3	3	3	3	3	3	3	3	3	
Gaz-System	Entry	3	3	5	5	5	5	5	5	5	5	
Applied		3	3	3	3	3	3	3	3	3	3	

Development of capacity on Lasow direction has been supported by signals received from market participants, however the scope of investments and possible time frame is currently being analysed.

B.3.49 Germany-Switzerland: Wallbach

B.3.50 Hungary-Croatia: Donji Miholjac / Dravaszerdahely

B.3.51 Hungary-Romania: Arad / Csanádpalota

B.3.52 Hungary-Serbia: Kiskundorozsma

B.3.53 Italy-Austria: Tarvisio

B.3.54 Italy-Slovenia: Šempeter / Gorizia

		Capacity (Mio. Nm ³ /day)									
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
SRG	Exit	4	4	4	4	4	4	4	4	4	4
Geoplín	Entry	3	3	3	3	3	6	6	6	6	6
Applied		3	3	3	3	3	4	4	4	4	4

B.3.55 Italy-Switzerland: Griespass

B.3.56 Latvia-Estonia: Karsi

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Latvijas Gaze	Exit	7	7	7	7	7	7	7	7	7	7	
Estigaas	Entry				No figures received							
Applied		7	7	7	7	7	7	7	7	7	7	

B.3.57 Latvia-Lithuania: Kiemenai

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Latvijas Gaze	Exit	2	2	2	2	2	2	2	2	2	2	
Lietuvos Dujos	Entry	5	5	5	5	5	5	5	5	5	5	
Applied		2	2	2	2	2	2	2	2	2	2	

B.3.58 Lithuania-Latvia: Kiemenai

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Lietuvos Dujos	Exit	5	5	5	5	5	5	5	5	5	5	
Latvijas Gaze	Entry	5	5	5	5	5	5	5	5	5	5	
Applied		5	5	5	5	5	5	5	5	5	5	

B.3.59 Montenegro-Croatia: Dubrovnik

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
	Exit	No figures received										
Plinacro	Entry				21	21	21	21	21	21	21	
Applied		0	0	0	21	21	21	21	21	21	21	

B.3.60 Netherlands-Belgium: Obbicht / Dilsen

B.3.61 Netherlands-Belgium: 's Gravenvoeren

		Capacity (Mio. Nm ³ /day)									
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
GTS	Exit	22	22	23	29	29	29	33	33	33	33
Fluxys	Entry	36	36	36	36	36	36	36	36	36	36
Applied		22	22	23	29	29	29	33	33	33	33

B.3.62 Netherlands-Belgium: Zandvliet H-gas (Fluxys)

B.3.63 Netherlands-Belgium: Zandvliet H-gas (Wingas)

B.3.64 Netherlands-Belgium: Zandvliet L-gas & Hilvarenbeek / Poppel

		Capacity (Mio. Nm³/day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
GTS	Exit	Confidential										
Fluxys	Entry	90	90	90	90	90	90	90	90	90	90	
Applied		90	90	90	90	90	90	90	90	90	90	

B.3.65 Netherlands-Belgium: Zelzate (GTS)

		Capacity (Mio. Nm³/day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
GTS	Exit	0	10	24	24	24	24	24	24	24	24	
Fluxys	Entry	0	29	29	29	29	29	29	29	29	29	
Applied		0	10	24	24	24	24	24	24	24	24	

B.3.66 Netherlands-Germany: Bocholtz

		Capacity (Mio. Nm³/day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
GTS	Exit	35	35	42	43	43	43	43	43	43	43	
<hr/>												
EGT	Entry	4	4	4	11	11	11	11	11	11	11	
ENI GTD	Entry	33	32	32	32	32	32	32	32	32	32	
Thyssengas	Entry	1	1	1	1	1	1	1	1	1	1	
Sum	Entry	38	37	37	44	44	44	44	44	44	44	
Applied		35	35	37	43	43	43	43	43	43	43	

B.3.67 Netherlands-Germany: Bunde - Oude Statenzijl H-gas (EGT 1)

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
GTS	Exit	16	16	16	16	16	16	16	16	16	16	
EGT	Entry	10	10	10	10	10	10	10	10	10	10	
Applied		10	10	10	10	10	10	10	10	10	10	

B.3.68 Netherlands-Germany: Bunde - Oude Statenzijl H-gas (EGT 2 / Renato)

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
GTS	Exit	Confidential										
EGT	Entry	4	4	4	4	4	4	4	4	4	4	
Applied		4	4	4	4	4	4	4	4	4	4	

B.3.69 Netherlands-Germany: Bunde - Oude Statenzijl H-gas (GuD)

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
GTS	Exit	10	10	10	10	10	10	10	10	10	10	
GuD	Entry	6	6	6	6	6	2	2	2	2	2	
Applied		6	6	6	6	6	2	2	2	2	2	

B.3.70 Netherlands-Germany: Bunde - Oude Statenijl H-gas (WGT)

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
GTS	Exit	7	7	7	7	7	7	7	7	7	7	
WGT	Entry	5	5	5	5	5	5	5	5	5	5	
Applied		5	5	5	5	5	5	5	5	5	5	

B.3.71 Netherlands-Germany: Bunde - Oude Statenijl L-gas (EWE NETZ)

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
GTS	Exit	8	8	8	8	8	8	8	8	8	8	
EWE NETZ	Entry	8	8	8	Confidential							
Applied		8	8	8	8	8	8	8	8	8	8	

Remark on row "Applied": Figures for the years 2013 to 2019 determined by constant extrapolation of the EWE NETZ figure of 2012.

B.3.72 Netherlands-Germany: Bunde - Oude Statenijl L-gas (GuD)

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
GTS	Exit	23	23	23	23	23	23	23	23	23	23	
GuD	Entry	18	18	18	17	15	15	15	15	15	15	
Applied		18	18	18	17	15	15	15	15	15	15	

B.3.74 Netherlands-Germany: Haanrade

		Capacity (Mio. Nm ³ /day)									
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
GTS	Exit	Confidential									
Thyssengas	Entry	Confidential									
Applied		0	0	0	0	0	0	0	0	0	0

B.3.75 Netherlands-Germany: Vreden / Winterswijk

		Capacity (Mio. Nm ³ /day)									
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
GTS	Exit	43	43	43	43	43	43	43	43	43	43
EGT	Entry	35	35	35	35	37	37	37	37	37	37
Applied		35	35	35	35	37	37	37	37	37	37

B.3.76 Netherlands-Germany: Zevenaar / Elten

		Capacity (Mio. Nm ³ /day)									
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
GTS	Exit	Confidential									
EGT	Entry	33	33	33	33	34	34	34	34	34	34
Thyssengas	Entry	23	23	23	23	23	23	23	23	23	23
Sum	Entry	56	56	56	56	57	57	57	57	57	57
Applied		56	56	56	56	57	57	57	57	57	57

B.3.77 Netherlands-United Kingdom: Bacton

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
BBL company	Exit	36	43	43	43	43	43	43	43	43	43	
NG	Entry	39	47	47	47	47	47	47	47	47	47	
Applied		36	43	43	43	43	43	43	43	43	43	

B.3.78 Netherlands-United Kingdom: Julianadorp (H-gas)

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
GTS	Exit	33	34	37	39	40	40	40	40	40	40	
BBL company	Entry	36	43	43	43	43	43	43	43	43	43	
Applied		33	34	37	39	40	40	40	40	40	40	

B.3.79 Poland Europol Gaz-Poland Gaz-System: Lwówek

B.3.80 Poland Europol Gaz-Poland Gaz-System: Włocławek

B.3.81 Poland-Germany: Mallnow

B.3.82 Portugal-Spain: Valença do Minho / Tuy

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
REN Gasodutos	Exit	1	1	1	1	1	1	1	1	1	1	
Enagas	Entry	1	1	1	1	1	1	1	1	1	1	
Applied		1	1	1	1	1	1	1	1	1	1	

REN and ENAGAS have jointly defined the IP Capacity as the **minimum common value** of Exit and Entry capacities at both sides of the border, focusing on the development of a harmonized approach for IP agreements. (Ref. ERGEG SGRI).

B.3.83 Portugal-Spain: Badajoz / Campo Major

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
REN Gasodutos	Exit	4	1	9	9	9	9	9	9	9	9	
Enagas	Entry	6	6	9	9	9	9	9	9	9	9	
Applied		4	1	9	9	9	9	9	9	9	9	

REN and ENAGAS have jointly defined the IP Capacity as the **minimum common value** of Exit and Entry capacities at both sides of the border, focusing on the development of a harmonized approach for IP agreements. (Ref. ERGEG SGRI).

B.3.84 Romania-Bulgaria: Negru Voda

		Capacity (Mio. Nm ³ /day)									
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Transgaz	Exit 1	13	13	13	13	13	13	13	13	13	13
Transgaz	Exit 2	25	25	25	25	25	25	25	25	25	25
Transgaz	Exit 3	22	22	22	22	22	22	22	22	22	22
Sum	Exit	60	60	60	60	60	60	60	60	60	60
Bulgartransgaz	Entry	58	58	58	58	58	58	58	58	58	58
Applied		58	58	58	58	58	58	58	58	58	58

B.3.85 Romania-Bulgaria: Interconnector

		Capacity (Mio. Nm ³ /day)									
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Transgaz	Exit	No figures received									
Bulgartransgaz	Entry	0	0	0	4	4	4	4	4	4	4
Applied		0	0	0	0	0	0	0	0	0	0

B.3.86 Serbia-Bosnia and Herzegovina: Zvornik

		Capacity (Mio. Nm ³ /day)									
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Srbijagas	Exit	2	2	2	2	2	2	2	2	2	2
	Entry	1	1	1	2	2	2	2	2	2	2
Applied		1	1	1	2	2	2	2	2	2	2

B.3.87 Slovakia-Austria: Baumgarten

B.3.88 Slovakia-Czech Republic: Lanžhot

B.3.89 Slovenia-Croatia: Rogatec

B.3.90 Slovenia-Croatia: Rogatec II

		Capacity (Mio. Nm ³ /day)									
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Geoplín	Exit	No figures received									
Plinacro	Entry					14	14	14	14	14	14
Applied		0	0	0	0	14	14	14	14	14	14

B.3.91 Slovenia-Italy: Šempeter / Gorizia

		Capacity (Mio. Nm ³ /day)									
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Geoplín	Exit	0	0	0	2	2	6	6	6	6	6
SRG	Entry	2	2	2	2	2	2	2	2	2	2
Applied		0	0	0	2	2	2	2	2	2	2

Snam Rete Gas is carrying out the engineering and permits acquisition activities for the projects of reinforcement of the Italian network suitable to increase the firm capacity of Gorizia entry point in order to match upstream capacities. For these projects Snam Rete Gas will start the construction phase according to the outcomes of open season procedures and the subsequent commitments with the network users.

B.3.92 Spain-France: Biriáto (Irún)

		Capacity (Mio. Nm ³ /day)									
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Naturgas*	Exit	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
TIGF	Entry	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Applied		0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4

* Interconnection with Enagas Spanish network through Naturgas IP

The TSO's have jointly defined the IP Capacity as the **minimum common value** of Exit and Entry capacities at both sides of the border, focusing on the development of a harmonized approach for IP agreements. This IP connects currently local networks. With the goal of increasing this capacity, in 2009 a new pipeline on the Spanish side will be in operation, and there are other developments of infrastructures under study on the French side. (Ref. ERGEG SGRI).

B.3.93 Spain-France: Larrau

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Enagas	Exit		3	3	9	9	9	9	9	9	9	
TIGF	Entry		3	3	9	9	9	9	9	9	9	
Applied		0	3	3	9	9	9	9	9	9	9	

The TSO's have jointly defined the IP Capacity as the **minimum common value** of Exit and Entry capacities at both sides of the border, focusing on the development of a harmonized approach for IP agreements. TSO's have identified new infrastructures that eliminate current gaps Entry-Exit, and are working in a coordinate network development. (Ref. ERGEG SGRI).

B.3.94 Spain-Portugal: Valença do Minho / Tuy

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Enagas	Exit	2	2	5	5	5	5	5	5	5	5	
REN Gasodutos	Entry	2	2	5	5	5	5	5	5	5	5	
Applied		2	2	5	5	5	5	5	5	5	5	

REN and ENAGAS have jointly defined the IP Capacity as the **minimum common value** of Exit and Entry capacities at both sides of the border, focusing on the development of a harmonized approach for IP agreements. The new capacity is the result of a coordinated development. (Ref. ERGEG SGRI).

B.3.95 Spain-Portugal: Badajoz / Campo Major

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Enagas	Exit	12	12	12	12	12	12	12	12	12	12	
REN Gasodutos	Entry	11	11	11	11	11	11	11	11	11	11	
Applied		11	11	11	11	11	11	11	11	11	11	

REN Gasodutos and ENAGAS have jointly defined the IP Capacity as the **minimum common value** of Exit and Entry capacities at both sides of the border, focusing on the development of a harmonized approach for IP agreements. (Ref. ERGEG SGRI).

B.3.96 Switzerland-Italy: Griespass

B.3.97 United Kingdom-Belgium: Bacton

B.3.98 United Kingdom-Belgium: Zeebrugge IZT

B.3.99 United Kingdom-Ireland

The following interconnection points connecting the Republic of Ireland and Northern Ireland with the National Grid transmission system in the United Kingdom are listed in the order of the physical flow.

United Kingdom National Grid – United Kingdom Gaslink: Moffat

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
NG	Exit	38	38	38	38	38	38	38	38	38	38	
Gaslink	Entry	31	31	31	31	31	31	31	31	31	31	
Applied		31	31	31	31	31	31	31	31	31	31	

Capacity at Moffat to supply the South West Scotland Pipeline (to Northern Ireland and Ireland)

United Kingdom Gaslink-United Kingdom Premier Transmission: Twynholm

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Gaslink	Exit	8	8	8	8	8	8	8	8	8	8	
Premier Transmission	Entry	8	8	8	8	8	8	8	8	8	8	
Applied		8	8	8	8	8	8	8	8	8	8	

Capacity at Twynholm to supply the Scotland Northern Ireland Pipeline (SNIP) from the South West Scotland Pipeline

United Kingdom Gaslink-Ireland Gaslink: Brighouse

		Capacity (Mio. Nm ³ /day)										
TSO	Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Gaslink (UK)	Exit	23	23	23	23	23	23	23	23	23	23	
Gaslink(Ireland)	Entry	23	23	23	23	23	23	23	23	23	23	
Applied		23	23	23	23	23	23	23	23	23	23	

Capacity at Brighouse Bay to supply Ireland from the South West Scotland Pipeline via Interconnector 1 and Interconnector 2

B.4. European Potential Supply / Demand vs. Capacity Analysis



© Image courtesy of Snam Rete Gas

The objective of the potential supply / demand vs. capacity analysis is to determine a usage scenario within the given cross-border capacities determined in the previous chapter B.3 fulfilling the ENTSOG Peak Day Potential Supply Scenario and the ENTSOG Peak Day Demand Scenario figures of each country.

The approach applied to determine a usage scenario fulfilling this objective is described below. It should be noted that many other approaches are possible which may also lead to capacity usage scenarios fulfilling the above objective.

Methodology

For each year, net usage directions between country borders are determined in line with the objective to find a usage scenario providing coverage of the demand scenario figure if possible. The usage scenario values for the other usage direction are set to zero.

Based on the determined usage directions, a calculation sequence is applied such that the countries for which the exit usage scenario values have been determined are calculated first. This means for example that if the usage direction has been defined from the UK to Ireland, Ireland is calculated first and the usage scenario values for the border UK - Ireland are determined. Those usage scenario values are then used in the calculation for the UK.

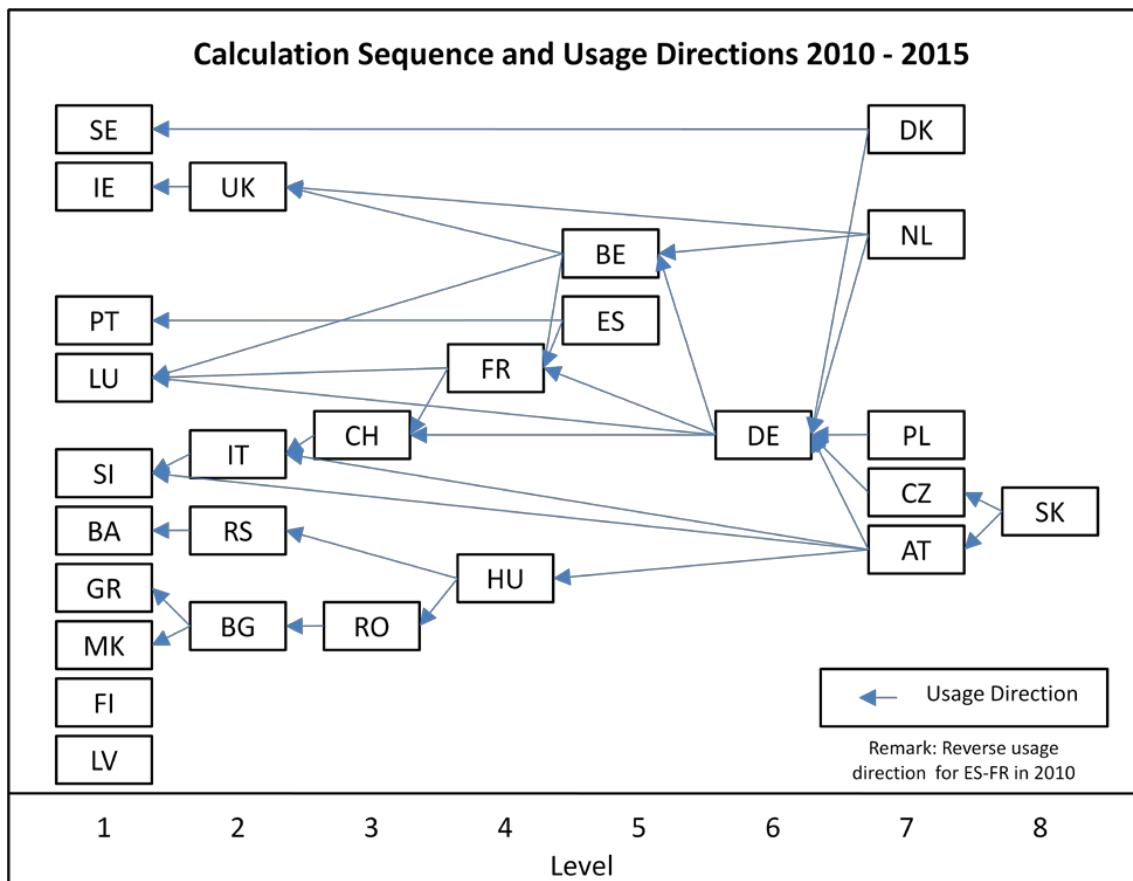
For each country the demand scenario values and the usage scenario values of the exit points (cross-border points, export points) are added and distributed to the entry points (pipeline import points, LNG entry points, cross-border points and entry points from storages and national production) pro rata in relation to the entry capacities, trying to use all entry points at the same percentage level.

Additional assumptions were applied in order to find a usage scenario providing coverage of the demand scenario figure if possible.

The analysis has been carried out for those countries for which peak day demand figures have been received from the respective ministries or TSOs.

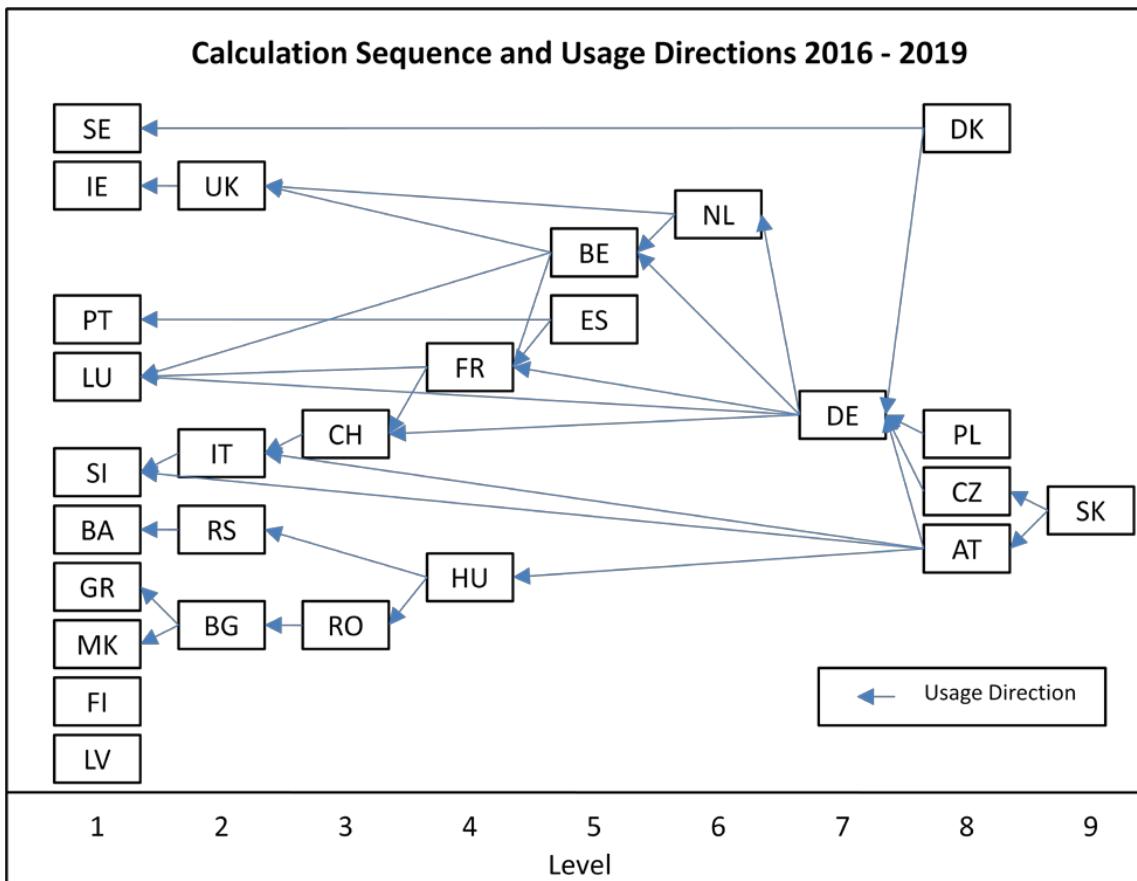
Assumptions

The following calculation sequence and usage directions were applied for the years 2010 to 2015:



Please note that the capacity from Spain to France is zero in 2010. Based on results of the Gas Regional Initiative South, an usage scenario value in the direction France to Spain of 3 Mio Nm³/day for 2010 has been applied.

For the years 2016 to 2019 the usage direction between the Netherlands and Germany was reversed and the following calculation sequence and usage directions were applied:



The following assumptions on usage scenario values for exit points to countries not included in this analysis were applied:

Mio. Nm ³ /day	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
BG-TK	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8
HU-HR	0	0	-3	-4	-5	-5	-5	-5	-5	-5
LT-LV	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
LT-RU	-11	-11	-11	-11	-11	-11	-11	-11	-11	-11
SI-HR	-4	-4	-5	-5	-6	-6	-6	-6	-6	-6

The following values were assumed to avoid negative country values, if possible.

B.4.1 Albania

Not included in this analysis as no peak day demand figures were received.

B.4.2 Austria

B.4.3 Belgium

B.4.4 Bosnia and Herzegovina

Capacities										
Mio. Nm ³ /day	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Entries										
RS-BA	1	1	1	2	2	2	2	2	2	2
Exits										
Demand	-1	-1	-1	-2	-2	-2	-2	-2	-2	-2

B.4.5 Bulgaria

B.4.6 Croatia

Not included in this analysis as no peak day demand figures were received.

B.4.7 Czech Republic

B.4.8 Denmark

Capacities										
Mio. Nm ³ /day	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Entries										
Storage	18	18	18	18	18	18	18	18	18	18
National Production	22	20	17	16	15	13	11	8	7	7
Exits										
Demand	-26	-26	-26	-26	-26	-26	-26	-26	-26	-26
DK-SE	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8
DK-DE	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3

Usage Scenario										
Mio. Nm ³ /day	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Entries										
Storage	16	17	18	18	18	18	18	18	18	18
National Production	20	19	17	16	15	13	11	8	7	7
Exits										
Demand	-26	-26	-26	-26	-26	-26	-26	-26	-26	-26
DK-SE	-7	-7	-7	-8	-8	-8	-8	-8	-8	-8
DK-DE	-3	-3	-2	0	0	0	0	0	0	0
Net										
Country Net	0	0	0	0	-1	-3	-5	-8	-9	-9

New import capacity is planned in Ellund IP to replace decline in national production from year 2014.
The exact new entry capacity will be announced during 2009.

B.4.9 Finland

Capacities										
Mio. Nm ³ /day	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Entry										
Pipeline Import	25	25	25	25	25	25	25	25	25	25
Exit										
Demand	-22	-22	-22	-22	-22	-24	-24	-24	-24	-24

B.4.10 Former Yugoslav Republic of Macedonia

B.4.11 France

B.4.11 Germany

B.4.13 Greece

Capacities										
Mio. Nm ³ /day	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Entries										
Pipeline Import	7	7	7	7	7	34	34	34	34	34
LNG	13	13	13	13	13	13	13	13	13	13
BG-GR	12	12	12	12	12	12	12	12	12	12
Exits										
Demand	-22	-24	-28	-30	-32	-33	-33	-34	-34	-35

B.4.14 Hungary

Capacities										
Mio. Nm³/day	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Entries										
Pipeline Import	53	53	68	68	68	68	68	68	68	68
Storage	53	59	59	59	59	59	59	59	59	59
National Production	10	8	7	6	6	5	4	4	3	3
AT-HU	12	12	12	12	12	12	12	12	12	12
Exits										
Demand	-111	-113	-126	-126	-128	-128	-130	-131	-132	-132
HU-RO	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4
HU-HR	0	0	-18	-18	-18	-18	-18	-18	-18	-18
HU-RS	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12

Usage Scenario										
Mio. Nm³/day	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Entries										
Pipeline Import	50	50	65	67	68	68	68	68	68	68
Storage	51	56	57	59	59	59	59	59	59	59
National Production	10	8	7	6	6	5	4	4	3	3
AT-HU	12	11	12	12	12	12	12	12	12	12
Exits										
Demand	-111	-113	-126	-126	-128	-128	-130	-131	-132	-132
HU-RO	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3
HU-HR	0	0	-3	-4	-5	-5	-5	-5	-5	-5
HU-RS	-9	-9	-9	-11	-11	-12	-12	-12	-12	-12
Net										
Country Net	0	0	0	0	-2	-4	-7	-8	-10	-10

Additional projects like e.g. Nabucco, South Stream or additional storages may fill the capacity gap in the years 2014 to 2019. Furthermore a revised demand scenario is expected to be published in the first half of 2010 which may possibly show reduced demand scenario figures due to the economical downturn, delayed gas power plant projects and ecological measures.

B.4.15 Ireland

Capacities										
Mio. Nm ³ /day	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Entries										
UK-IE	23	23	23	23	23	23	23	23	23	23
Storage	3	3	3	3	3	3	3	3	3	3
National Production	0.6	10	10	9	7	6	3	3	2	2
Exits										
Demand (RoI)	-23	-25	-26	-26	-26	-26	-26	-27	-27	-28

B.4.16 Italy

Capacities										
Mio. Nm ³ /day	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Entries										
Pipeline Import	121	122	124	124	124	124	124	124	124	124
Storage	150	150	150	150	150	150	150	150	150	150
National Production	23	23	23	22	21	20	19	18	17	16
LNG	37	37	37	52	52	52	52	52	52	52
AT-IT	101	101	101	101	101	101	101	101	101	101
CH-IT	56	56	56	56	56	56	56	56	56	56
SI-IT	0	0	0	2	2	2	2	2	2	2
Exits										
Demand	-394	-400	-407	-411	-414	-418	-422	-425	-429	-433

B.4.17 Latvia

Not included in this analysis as no peak day demand figures were received.

B.4.18 Lithuania

Demand of 14 Mio. Nm³/day of 2010 extrapolated as constant.

B.4.19 Luxemburg

B.4.20 Montenegro

Not included in this analysis as no peak day demand figures were received.

B.4.21 Netherlands

Capacities										
Mio. Nm ³ /day	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Entries										
National Production + Storage	517	553	561	555	540	515	496	478	464	449
Pipeline Import	37	45	47	48	48	48	48	48	48	48
LNG	0	0	30	30	30	30	33	33	33	33
BE-NL	22	27	28	28	28	28	28	28	28	28
DE-NL	37	37	38	40	40	40	40	40	40	40
Exits										
Demand	-428	-435	-441	-441	-439	-438	-437	-435	-433	-431
NL-BE	-126	-136	-151	-157	-157	-157	-161	-161	-161	-161
NL-DE	-177	-177	-179	-184	-185	-181	-181	-181	-181	-181
NL-UK	-33	-34	-37	-39	-40	-40	-40	-40	-40	-40

B.4.22 Poland

Capacities										
Mio. Nm ³ /day	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Entries										
Pipeline Import	134	134	134	134	134	134	134	134	134	134
Storage	37	49	55	55	55	55	55	55	55	55
National Production	12	12	12	12	12	11	11	11	11	11
LNG	0	0	0	0	15	15	15	15	23	23
CZ-PL	0	0	0	0	0	0	0	0	0	0
DE-PL	3	3	3	3	3	3	3	3	3	3
Exits										
Demand	-72	-76	-78	-82	-82	-82	-83	-83	-84	-85
PL-DE	-89	-89	-89	-89	-89	-89	-89	-89	-89	-89

As no response was received from Europol Gaz, the yearly transport capacity of the Europol Gaz transmission system of 32.3 BCM/year was converted to a daily transport capacity by assuming that the BCM refers to a cubic metre at 20° C (conversion factor 0.9318). Furthermore a load factor of 0.8 was assumed. The rounded result is 103 Mio. Nm³/day.

The pipeline import capacity is assumed as the sum of this 103 Mio. Nm³/day and the import capacity figures received from Gaz-System (BY-PL at Wysokoje of 15 Mio. Nm³/day and UA-PL (Drozdowicze) of 16 Mio. Nm³/day).

The cross-border capacity from Poland to Germany is assumed as the difference between the 103 Mio. Nm³/day and the sum of the exit capacities from Europol Gaz to the Gaz-System transmission system (Lwówek: 6 Mio. Nm³/day, Włocławek: 8 Mio. Nm³/day) which is 89 Mio. Nm³/day.

B.4.23 Portugal

B.4.24 Romania

B.4.25 Serbia

Capacities										
Mio. Nm ³ /day	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Entries										
HU-RS	12	12	12	12	12	12	12	12	12	12
Storage	5	5	5	5	5	5	5	5	5	5
National Production	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Exits										
Demand	-12	-13	-13	-14	-14	-15	-15	-16	-20	-20
RS-BA	-1	-1	-1	-2	-2	-2	-2	-2	-2	-2

B.4.26 Slovakia

B.4.27 Slovenia

Capacities										
Mio. Nm ³ /day	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Entries										
AT-SI	7	7	8	10	10	10	10	10	10	10
IT-SI	3	3	3	3	3	4	4	4	4	4
Exits										
Demand	-6	-6	-6	-7	-7	-8	-8	-8	-8	-9
SI-HR	-5	-5	-5	-5	-19	-19	-19	-19	-19	-19
SI-IT	0	0	0	-2	-2	-2	-2	-2	-2	-2

B.4.28 Spain

Capacities										
Mio. Nm ³ /day	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Entries										
Pipeline Import	57	57	57	57	57	57	57	57	57	57
LNG	170	170	189	203	223	223	230	230	230	230
Storage	11	16	16	16	16	42	42	42	42	42
FR-ES	9	9	9	9	9	9	9	9	9	9
PT-ES	5	2	10	10	10	10	10	10	10	10
Exits										
Demand *	-209	-224	-245	-250	-255	-266	-279	-288	-291	-293
ES-FR	0.4	-3	-3	-9	-9	-9	-9	-9	-9	-9
ES-PT	-13	-13	-16	-16	-16	-16	-16	-16	-16	-16

Usage Scenario										
Mio. Nm ³ /day	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Entries										
Pipeline Import	51	55	56	55	52	50	51	52	53	54
LNG	153	164	184	196	204	193	206	212	215	217
Storage	10	16	16	15	15	37	38	39	39	39
FR-ES	3	0	0	0	0	0	0	0	0	0
Exits										
Demand *	-209	-224	-245	-250	-255	-266	-279	-288	-291	-293
ES-FR	0	-3	-2	-7	-7	-6	-6	-6	-6	-6
ES-PT (Net)	-8	-9	-9	-9	-9	-8	-9	-9	-10	-10
Net										
Country Net	0									

* Demand scenario values as given in Attachment A have been shifted to one year later because the peak day demand is expected to occur in the fourth quarter of the respective year while the capacity figures refer to the beginning of such year.

B.4.29 Sweden

Capacities										
Mio. Nm ³ /day	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Entries										
DK-SE	8	8	8	8	8	8	8	8	8	8
Storage	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Exits										
Demand	-7	-7	-7	-9	-9	-9	-9	-9	-9	-9

B.4.30 Switzerland

Capacities											
Mio. Nm ³ /day	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Entries											
DE-CH	47	46	46	46	46	46	46	46	46	46	46
FR-CH	20	20	20	20	20	20	20	20	20	20	20
Exits											
Demand	-16	-16	-16	-16	-16	-16	-16	-16	-16	-16	-16
CH-IT	-56	-56	-56	-56	-56	-56	-56	-56	-56	-56	-56

Peak day demand values of 16 Mio. Nm³/day applied for the years 2010-2019 based on an information of past peak flow values received from Swissgas.

Usage Scenario *											
Mio. Nm ³ /day	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Entries											
DE-CH	43	43	44	43	44	45	46	46	46	46	46
FR-CH	19	19	19	19	19	20	20	20	20	20	20
Exits											
Demand	-16	-16	-16	-16	-16	-16	-16	-16	-16	-16	-16
CH-IT	-46	-46	-47	-46	-47	-49	-50	-50	-50	-50	-50
Net											
Country Net	0										

* The Swiss TSOs would like to stress that the usage scenario values shown in this table are the result of the calculation methodology applied by ENTSOG; they do not correspond to the opinion of the involved Swiss TSOs.

B.4.31 United Kingdom (incl. Northern Ireland)

B.4.32 UNMI Kosovo

Not included in this analysis. Peak day demand figures were received but no information on the entry capacity development.

Note

As described in the introduction of this Attachment B, a summary of the findings of the European peak day analysis is given in the summary chapter of the main document.



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