Gas Regional Initiative

North West Regional Energy Market

Transmission Transparency Project
Final Implementation Report

Ref: GRI-NW-RCC-22-05
Final Version
26-05-2009

European Regulators' Group for Electricity and Gas
Contact: Council of European Energy Regulators ASBL
28 rue le Titien, 1000 Bruxelles
Arrondissement judiciaire de Bruxelles
RPM 0861.035.445

Document history

Version	Date	Description	Author
1	25 Feb 2009	Version 1. Comments received from: - BNetzA - Ontras - E.ON Gastranpsort - WINGAS TRANSPORT - Energiekamer - GTS - BBL - CREG - Fluxys - Gaslink	Ofgem
2	18 March 2009	Version 2. Comments received from: - Ontras - Gasunie Deutschland - WINGAS TRANSPORT - BBL	Ofgem
3	26 March 2009	Final version	Ofgem

Table of Contents

Contents

Figures

Tables

1 Executive Summary

The publication of this report marks the completion of the first North West Gas Regional Initiative (GRI NW) project to improve gas network transparency.

For the project seventeen regional transmission system operators[1] (TSOs) committed to publishing information on capacity availability and gas flows at cross-border interconnection points by the end of 2008. Participation in the project was on a voluntary basis.

The TSOs committed to releasing the specified information at one of three project milestones in May, October and December 2008. An implementation report was published for each of these milestones to explain the progress made by participating TSOs[2]. This is the third and final implementation report.

1.1 Project deliverables

Regional stakeholders agreed that the project should focus on delivering improved information on capacity availability and gas flows. This information is crucial for network users to understand the volume of capacity and capacity products available at cross-border interconnection points. The information also helps network users attach a fair and efficient value to the capacity products offered by TSOs and make more efficient use of the existing infrastructure.

The deliverables for the project were developed on the basis of a detailed list of information requirements presented by the European Federation of Energy Traders (EFET) and the International Federation of Industrial Energy Consumers (IFIEC).

The following seven data types were agreed as deliverables. On transmission capacity:

1. maximum technical capacity (C1);
2. the probability of interruption (C2); and,
3. daily commercial firm and interruptible capacity (C3).

[1] RWE Transportnetz Gas, Fluxys, E.ON Gastransport, Svenska Kraftnät, National Grid, Gaslink, GRTgaz, GTS, WINGAS TRANSPORT GmbH & Co. KG, Interconnector UK, Ontras, Energinet, Gasunie Deutschland, DEP, Swedegas, GRTgaz DT

[2] These reports are available at: http://www.ofgem.gov.uk/Europe/Whatwedo/RegionalInit/Pages/RegionalInit.aspx; or, http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_INITIATIVES/GRI/North_West/Priorities1/Transparency

On gas flows:

1. daily flows and interruptions (F1);
2. daily prompt allocation information (F2);
3. daily aggregate day-ahead nominations (F3); and
4. historic gas flows (F4).

1.2 Project progress

Overall, the participating TSOs report that they are now 90% compliant with the agreed deliverables compared to 50% compliance reported at the start of the project. Compliance, as explained in Section 8 of this report, is measured as the proportion of the agreed project deliverables that TSOs report publishing.

There are ten TSOs (E.ON Gastransport, Fluxys, RWE Transportnetz Gas, National Grid, GTS, Interconnector UK, Gaslink, Swedegas and Svenska Kraftnät) that now publish the specified information for all seven data types. At the start of the project only Interconnector UK and GTS reported that they already published all the specified information.

There are now four data types where all TSOs report publishing all specified information. These are the maximum technical capacity at each cross-border interconnection point (C1), daily updates of commercial firm and interruptible capacity availability (C3), daily prompt allocation information sent on a confidential basis to each shipper (F2) and a historic gas flow database (F4). We also consider that TSOs have met network users requirements with respect to publishing information on the probability of interruption (C2).

Five TSOs (BBL, DEP, Gasunie Deutschland, Ontras, GRTgaz and GRTgaz DT) have reported delays in publishing one data type and two TSOs (Energinet.dk and WINGAS TRANSPORT) have reported delays in publishing two data types. The two data types for which TSOs have delayed publication are daily flows and interruptions updated on a daily basis (F1) and day-ahead publication of aggregate nominations (F3).

Where there have been delays, TSOs have committed to specific dates in 2009 to publish the outstanding information. GRTgaz DT has stated that it will not be able to publish information on aggregate day ahead nominations before June 2009. The company has not yet committed to a specific date for the publication of this information after June 2009.

Over the course of the project the number of cross-border interconnections points subject to the less than three shipper rule (“LTTS rule”) has decreased from 35 to 20. The rule allows publication of information to be restricted at interconnection points where less than three shippers operate. The third package will delete the rule.

2 Introduction

The European Regulators Group for Electricity and Gas (ERGEG) launched its Electricity and Gas Regional Initiatives (ERI and GRI) in Spring 2006. The Regional Initiatives framework created seven electricity regions and three gas regions in Europe. The Gas Regional Initiative North-West (GRI NW) comprises nine countries[3] and is the largest of the three Gas Regional Initiatives in terms of market size and geographic scope.

The overall aim of the Regional Initiatives is to facilitate the development of regional gas and electricity markets, working in cooperation with stakeholders, to remove barriers to trade and competition. The Regional Initiatives take a bottom up approach to reform by identifying the key barriers to progress and where possible, work with stakeholders to implement appropriate solutions.

There is a consensus among stakeholders that the main priorities for GRI NW are transparency, capacity and investment[4]. These issues are critical to developing a market where gas can be freely traded between Member States on a non-discriminatory basis. This report focuses on the progress in transparency.

The energy sector review by DG Competition[5] highlighted the absence of information regarding the availability of gas transmission capacity as one of the main shortcomings in the market. Access to information on available network capacity and on the probability of interruptions is important to enable shippers to flow gas across Europe and to increase gas trading[6].

A lack of information on available transmission capacity also acts as a barrier to entry for new market participants. This is especially true where the Transmission System Operator (TSO) is part of a vertically integrated company that may use its information advantage in transmission to effectively block entry in other parts of the gas market supply chain. It is impossible to guarantee non-discriminatory market access and gas trading on a regional basis in the absence of effective transparency.

As this report does not approve or guarantee the accuracy of the data submitted by TSOs we welcome feedback from stakeholders on the validity of the TSOs reported progress.

[3] Belgium, Denmark, France (Northern zone), Germany, Great Britain, Ireland, Netherlands, Northern Ireland, Sweden, with Norway acting as an observer

[4] "Roadmap and Vision for the Gas Regional Initiative North West" presented at the third stakeholder group meeting April 2008

[5] The European Commission' s Directorate General for Competition (http://ec.europa.eu/comm/competition/index_en.html)

[6] As identified in the European Commission's energy sector inquiry http://ec.europa.eu/comm/competition/sectors/energy/inquiry/index.html

3 Stakeholder Feedback

We would welcome written feedback from all stakeholders on reported project progress. We will publish all written feedback alongside the report, unless it is clearly marked as confidential. The conclusions of the 2008 transmission transparency project will be discussed at the Gas Regulatory Forum in Madrid on 28 and 29 of May 2009.

Should you have any feedback please feel free to send those in electronic form to olaf.islei@ofgem.gov.uk or hard copies to the address below.

Olaf Islei

European Strategy and Environment

Office of Gas and Electricity Markets

9 Millbank

London

SW1P 3GE

If you wish to discuss any aspect of this document, please contact any of the following people who will be pleased to help:

Olaf Islei – telephone number: +44 (0) 207 901 7114, fax number: +44 (0) 207 901 7479, email: olaf.islei@ofgem.gov.uk

Carlos Martinez – telephone number: +44 (0) 207 901 7070, fax number: +44 (0) 207 901 7479, email: carlos.martinez@ofgem.gov.uk

AREAS FOR FEEDBACK

We would welcome stakeholder views on the following areas:

1. **Overall progress of the project**
2. **Whether the project has met the expectations of all stakeholders**
3. **The quality and consistency of the data published by TSOs for the market areas in which you are active**
4. **The accuracy of the report and its conclusions**

4 Purpose of the report

The purpose of this report is to comment on the implementation of the TSO transmission transparency project. In December 2007 sixteen TSOs[7] presented a project plan which committed them to publishing information on capacity availability and gas flows at cross-border interconnection points in the North-West gas region by the end of 2008. In addition BBL, who operate the interconnector between Great Britain and the Netherlands, became an active participant for the second and third milestone of the transparency project. As Swedegas and Svenska Kraftnät undertook joint publication of information, in the majority of the report we refer to there being 16 TSOs.

The data types to be published were agreed between TSOs and network users. It was agreed that TSOs would release new information on capacity[8] and actual gas flows[9]. The TSOs committed to publishing the agreed information by one of three project milestones in May, September or December 2008. The implementation report for the first milestone was published on 25 July 2008 and the implementation report for the second milestone was published on 21 November 2008.

In February 2009 the TSOs submitted data to Ofgem on implementation progress for the third and final milestone of the transparency project. This report presents this data and provides comment on implementation progress.

As this report does not approve or guarantee the accuracy of the data submitted by TSOs we would welcome feedback from stakeholders on the appropriateness of the reporting format and the validity of the TSOs reported progress.

5 Background

At workshops in Bonn and Dublin, in February and April 2007 respectively, stakeholders in the North-West Gas Regional Initiative agreed that network users, represented by the European Federation of Energy Traders (EFET) and the International Federation of Industrial Energy Consumers (IFIEC), would produce a detailed list of information requirements on behalf of gas market participants. The TSOs agreed to respond to this list with concrete proposals to improve transparency.

[7] RWE Transportnetz Gas, Fluxys, E.ON Gastransport, Svenska Kraftnät, National Grid, Gaslink, GRTgaz, GTS, WINGAS TRANSPORT GmbH & Co. KG (henceforth referred to as WINGAS TRANSPORT), Interconnector UK, Ontras, Energinet, Gasunie Deutschland, DEP, Swedegas, GRTgaz DT

[8] Max technical capacity, interruption probability, daily commercial firm and interruptible capacity

[9] Daily flows and interruptions, daily prompt allocations, Daily aggregate day-ahead nominations, historic gas flows

Questionnaires prepared by EFET and IFIEC were sent to all TSOs in the region in May and June 2007. The questionnaires built up a picture of the information that was already being published by TSOs and highlighted potential barriers identified by TSOs to further transparency improvements.

The results of the transparency questionnaires were presented at the September 2007 mini-workshop in London and a summary report was published on the ERGEG website[10]. At the workshop, TSOs and user groups agreed that the key priority for improving transparency was the provision of daily information on capacity and gas flows at cross-border interconnection points. TSOs committed to produce a project plan for the release of information on the seven specified data types (set out in section 4.2) at cross-border interconnection points.

The TSOs presented their initial project plan at the October 2007 Stakeholders Group meeting in the Hague. This plan set out the information that TSOs had agreed to provide and milestones for publication of the agreed information. A final draft of the project plan was presented and agreed upon at the Regional Coordination Committee (RCC) in December 2007.

6 The project plan

6.1 Objectives

As set out in the project plan presented at the October 2007 Stakeholders Group meeting, the overall objectives of the project are to:

- improve the publication of capacity and flow data to a high standard;
- provide clarity over current and proposed published data definitions; and
- demonstrate TSO commitment to respond to network users and market requirements.

At the April 2007 Dublin workshop, user groups expressed a preference for the rapid release of new information with respect to cross-border interconnector points rather than a focus on producing information in a particular format.

6.2 Deliverables

As mentioned above, stakeholders agreed on the specific data to be released by TSOs in 2008 at the September mini-workshop in London. The specific data types are listed below, with more detailed specification provided in Annex 1.

[10] http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_INITIATIVES/GRI/North_West /Achievements/Transparency

Transmission Capacity	
(C1)	Max technical capacity
(C2)	Interruption probability
(C3)	Daily commercial firm and interruptible capacity

Gas Flows	
(F1)	Daily flow and interruptions
(F2)	Daily prompt allocations
(F3)	Daily aggregate day-ahead nominations
(F4)	Historic gas flows

Table 1 – Data types to be released by TSOs for cross-border interconnection points

It should be clear that all the information requested is already available to TSOs and is essential to creating an environment in which network users can trade gas freely between Member States on a non-discriminatory basis.

For any interconnection point, information on maximum technical capacity is easily obtainable and held by all TSOs. Publishing this information enables network users to analyse local transmission constraints. It also signals the potential for network investment and development to the market. It is important that, in publishing information on technical capacity, TSOs also provide clarification on how they define and calculate maximum technical capacity.

The publication of daily commercial firm and interruptible capacity enables network users to determine what capacity is available for purchase and what has already been sold. Without this information it is impossible for network users to determine network utilisation rates and assess capacity constraints. In the absence of a perfectly effective firewall, supply affiliates of vertically integrated TSOs may have an unfair information advantage when competing downstream in the supply markets with other network users.

Information on interruption probability is important as it allows network users to understand the potential costs and risks of entering into a contract for interruptible transmission capacity. Without this information, it is not possible for network users to assess the relative value of firm and interruptible contracts.

An exact definition of interruption probability could not be agreed by TSOs and stakeholders. It was agreed that, if the information listed in Table 5 (Annex 1) were published, network users would have sufficient information to estimate the probability of being interrupted. Network users are still invited to develop a common definition of interruption probability based on the information in Table 5.

Network users require information on actual gas flows (daily prompt allocation information) in order to determine their costs. This information is commercially sensitive and is only provided to network users on an individual and confidential basis. However, aggregated information on daily flows and interruptions at an interconnection point, published on an ex-post basis (after the day), helps network users to assess the risk of interruption and manage the related potential costs.

The publication of information on daily aggregate day-ahead nominations enables network users to make an assessment of available capacities at each interconnection point. This would enable network users to adjust their nominations to utilise unused capacity and result in more efficient utilisation of the existing infrastructure. The release of historic gas flow information for interconnection points contributes to the assessment of the likelihood of interruption and helps network users assess grid capacity constraints.

6.3 Timeline

TSOs committed to the following timeline (Table 2) for the release of new information. The table sets out the project milestones against which TSOs expect to be able to release data. All TSOs committed to releasing all of the data types described in Table 1 for the relevant interconnection points before the end of the project period in December 2008. A detailed breakdown of the milestones committed to by individual TSOs can be found in Annex 2.

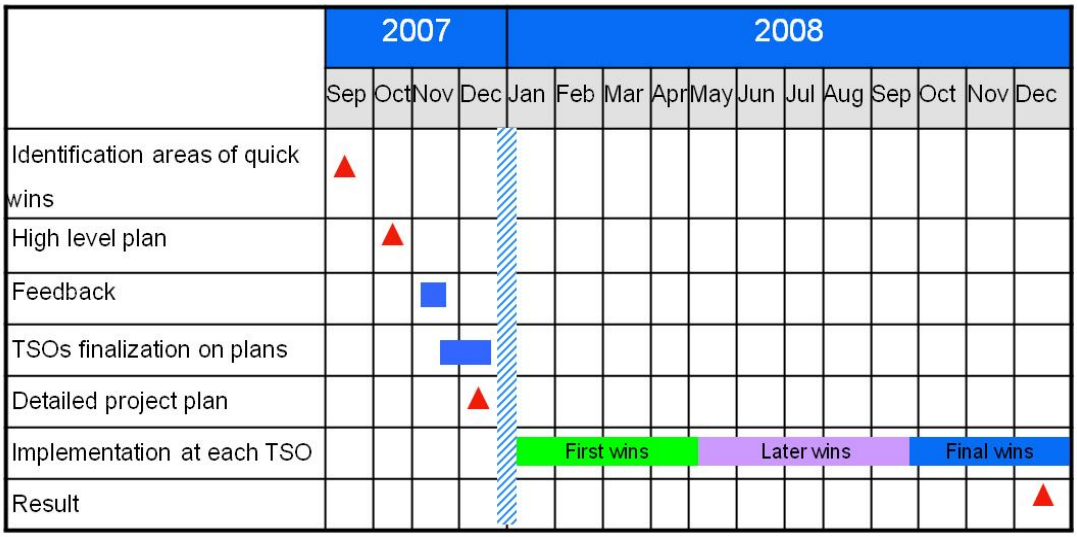

Table 2 – Project timeline

6.4 The first implementation report

In May 2008, TSOs submitted initial data for implementation progress after the first project milestone. A draft report on project progress was presented at a mini-workshop held in London on 10 July where stakeholders were invited to provide feedback. A final report was published on the ERGEG website on 25 July 2008.

The first project implementation report found that progress had been made by TSOs in releasing new information for market participants[11]. For the first milestone, the project was ahead of schedule in releasing data on historic gas flows (F4) due to early implementation by E.ON Gastransport and DEP[12]. The project was also broadly on track for releasing new data on daily commercial and interruptible capacity (C3) and daily prompt allocation information (F2). Nine TSOs reported that they published information in the first phase of the project. These were, Energinet.dk, E.ON. GT, WINGAS TRANSPORT, Gasunie Deutschland, Fluxys, GRTgaz DT, DEP, National Grid and Gaslink.

The areas where the project had fallen behind with the original implementation schedule were the release of information on the probability of interruption (C2), aggregate daily flow/interruption information (F1) and aggregate day-ahead nominations (F3). Half of the 16 TSOs still had to publish information on these data types before the final project milestone. The project was also behind schedule for the release of information on maximum technical capacity (C1). Overall four TSOs (WINGAS TRANSPORT, DEP, Swedegas and Energinet.dk) delayed implementation from the first to the second or third project milestone. One TSO (Ontras) reported that it would not be able to publish the information as expected because of the application of the LTTS rule.

6.5 The second implementation report

On 13 October 2008, TSOs submitted initial data for implementation progress at the second project milestone. A draft implementation report was published on 7 November 2008 and presented at the transparency workshop, part of the Regional Initiative Stakeholder Group meeting in London on 14 November 2008. The final version of the second implementation report was published on the 21 November 2008 taking into account feedback received at the workshop and in writing.

The second implementation report concluded that TSOs had made further progress in releasing new information for all data types. Six TSOs (RWE Transportnetz Gas, Gaslink, DEP, Gasunie Deutschland, Energinet.dk and WINGAS TRANSPORT) reported to have published additional information between June and October 2008.

Despite this progress, the feedback from TSOs showed that implementation had fallen significantly behind expectations for two data types, daily flows and interruptions (F1) and daily aggregate day ahead nominations (F3). For both of these date types, four TSOs committed to publish this information before the final project milestone in December 2008.

[11] http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_INITIATIVES/GRI/North_West/Final%20docs/NW%20GRI%20Transparency%20implementation%20report%20-%2025Jul08.pdf

[12] See annex 1 for more detailed data definitions

7 Less than three shipper rule ("LTTS Rule")

The European gas regulation[13] requires TSOs to publish information on technical, contracted and available capacities for all relevant entry and exit points on a regular basis and in a user-friendly standardised manner. However, at this stage, the scope of the project is for TSOs to release the relevant data at cross-border interconnection points. Interconnection points between TSOs respective networks within Member States are outside of the scope of the current project. This does not prevent TSOs from meeting their obligations under the European gas regulation and publishing the required information for all relevant points.

Where a TSO considers that it cannot make all the required information public due to confidentiality concerns, it must seek authorisation from the relevant national authority to limit publication. It is only possible to grant authorisation to limit the release of information where less than three network users have contracted for capacity at the same point. The RCC approved guidance on the application of the LTTS rule by TSOs, competent authorities and network users[14].

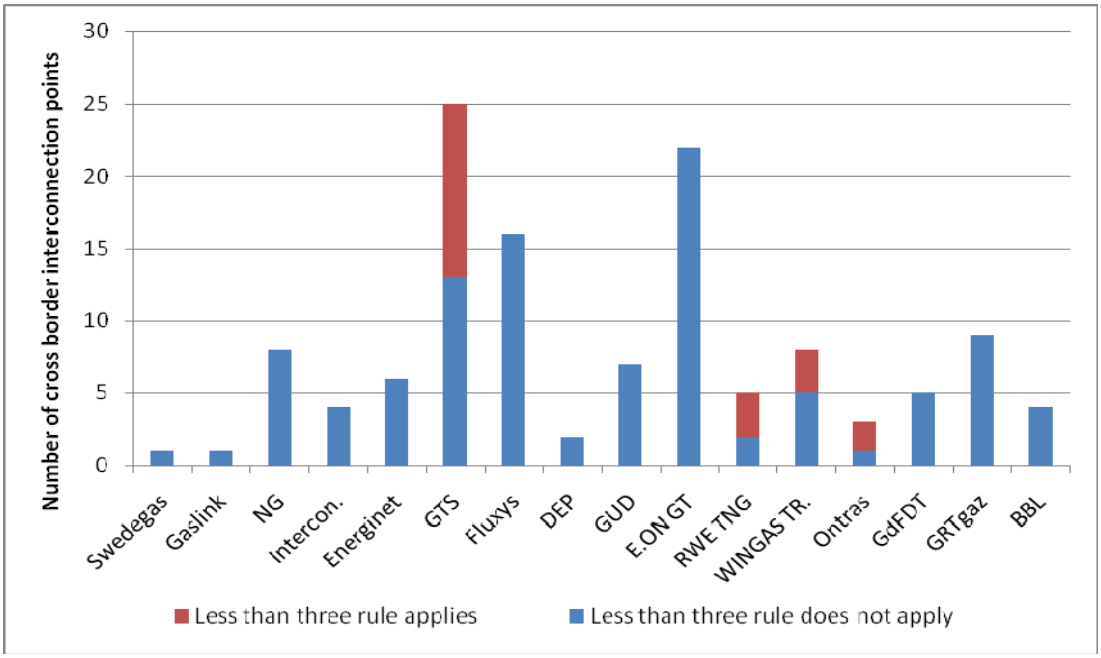

Figure 1 – Number of cross-border interconnection points, within the scope of the project that TSOs have identified as subject to the less than three shipper rule

[13] Regulation (EC) No. 1775/2005 of the European Parliament and of the Council of 28 September 2005 on conditions for access to the natural gas transmission networks

[14] This guidance is available on the GRI NW transparency website: http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_INITIATIVES/GRI/North_West/Meetings/SG_meetings/2nd_NNW_SG/DD/Cover%20note%20and%20revised%20less%203%20post%20consultclean.doc

Currently, of the 126 cross-border interconnection points identified, the TSOs consider that, at 106 points there are no confidentiality concerns. The number of cross-border interconnection points for which individual TSOs will make data available is summarised in Figure 1. A detailed breakdown of these interconnection points is included in Annex 3.

The number of interconnector points for which TSOs are able to release information has increased as the project has progressed. Table 3 shows that the proportion of interconnection points subject to the LTTS rule has declined since the start of the project[15]. The observed decline is the result of both action by individual TSOs to negotiate with shippers over the application of the rule and the relevant regulatory authority's decision on whether the rule should be applied.

For example, both E.ON Gastransport and RWE Transportnetz Gas reported that they were able to reach agreement with shippers that information can be released for an increased number of interconnection points. As of October 2008, BNetzA has now taken a decision with regard to all LTTS rule applications it received.

Energikamer and CREG have now also published final decisions for the application of the LTTS rule. In Belgium it was decided that the LTTS rule should not be applied.

In the Netherlands it was decided that the LTTS rule should apply to any interconnection points with less than three shippers, and that GTS has to meet some transparency requirements where the rule is applied (see section 5.1).

	January 2008	May 2008	October 2008	December 2008
Total number of Interconnection points	126	128	133	126
Subject to less than three shipper rule	35	33	29	20
Authority‟s decision pending	35	32	20	0
Per cent "confidential"	28%	26%	22%	16%
Per cent "pending"	28%	25%	15%	0%

Table 3 – Change in number of interconnection points, within the scope of the project, subject to the less than three shipper rule

[15] Table 2 does not include the interconnection points that E.ON GT considered to be subject to the less than three shipper rule before the start of the project.

7.1 Impact on data release

The table below describes the impact of the LTTS rule on the data released by TSOs. It should be noted that there may be some cross-border interconnection points where there are less than three shippers but a TSO has not sought the application of the LTTS rule to restrict information release. Also, TSOs do publish some information at interconnection points where the LTTS rule applies.

There are now only four TSOs that report to operate cross-border interconnection points subject to the LTTS rule. Table 4 provides a comparison of the data that TSOs reported to publish for cross-border interconnection points where the LTTS rule applies.

TSO	Less than three shipper rule applies	Data Type						
		C1	C2	C3	F1	F2	F3	F4
RWE TNG	Yes	×	✓	×	×	✓	×	×
GTS	Yes	×	✓	×/✓	×	✓	×	×
WINGAS TRANS.	Yes	×	✓	✓	×	✓	×	✓
Ontras	Yes	✓	×	✓	×	✓	×	×

Table 4 – comparison of data types to be published where the less than three shipper rule applies

In all cases the application of the LTTS rule reduces the number of data types that TSOs are able to release. However, it is clear that in each case, shippers, TSOs or regulators may have a different interpretation of data that is considered to be confidential. It should also be noted that we have limited our consideration of the impact of the LTTS rule to the seven data types specified in the project.

The decision by Energikamer on the application of the LTTS rule states that, at points with less than three shippers, GTS should not publish contracted or technical capacities. However GTS is required to publish available firm and interruptible capacity and information describing the probability of interruption. To describe the probability of interruption GTS published the aggregate amount of interruptible capacity sold and the volumes associated with any historic interruption updated hourly.

The third package proposals remove the possibility for TSOs to seek a derogation from the gas regulation's transmission transparency requirements. When the third package enters into force, TSOs will have to publish information for all relevant network points as defined in Annex 3 of the gas regulation.

8 Implementation Review

In their project plan TSOs committed to reporting on implementation progress in May, September and December.

It is important to note that in presenting this report we are not approving or guaranteeing the data submitted by TSOs and we would welcome feedback from other stakeholders on its accuracy.

Throughout this section of the report we refer to there being sixteen (not seventeen) TSOs because of the joint publication of information by the Swedish companies Swedegas and Svenska Kraftnät.

8.1 Expected implementation progress

The figure below compares expected implementation progress at the start of the project with observed implementation. The figure presents the aggregate number of data types to be released by the TSOs participating in the transparency project. If all TSOs[16] released all information then the maximum aggregate number of data types that could be published is 112[17]. In the rest of this section we will describe in detail the progress achieved by each participating TSO.

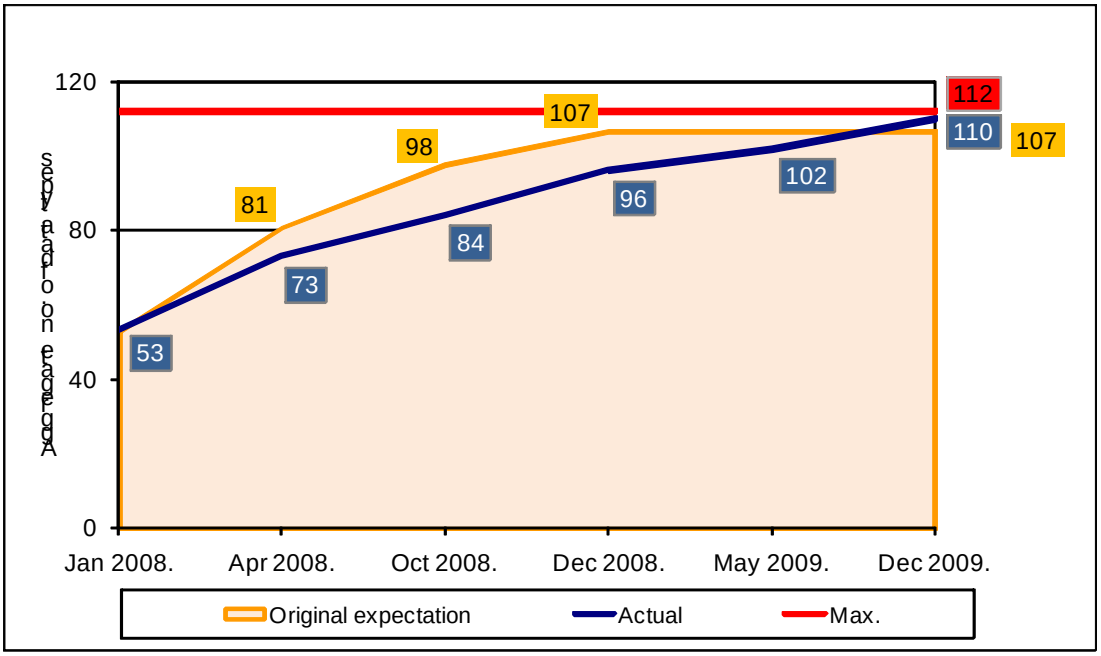

Figure 2 – Comparison of expected and actual aggregate implementation progress

8.2 Implementation by data type: third milestone

Table 5 describes implementation progress achieved by TSOs at the conclusion of the transmission transparency project. The table shows the data types that TSOs report publishing and data types where TSOs have committed to later dates for publication as a result of delays.

[16] This assumes the Swedish companies Svenska Kraftnät and Swedegas are jointly implementing the project requirements

[17] 16 TSOs x 7 Data Types = 112 (as Swedegas and Svenska Kraftnät are undertaking joint implementation we have counted them as one TSO)

As a result of joint implementation by Swedegas and Svenska Kraftnät some of the boxes in the table are marked in grey. For information on the probability of interruption Swedegas state that the best source of is data from Energinet.dk. This is because the interconnector operated by Swedegas is unidirectional and dependant on gas flows from Denmark. Links to information on the Energinet.dk website are provided on Swedegas's site. Swedegas also publish information on historic utilisation rates. Therefore, we consider that Swedegas has partly met network users requirements.

The TSOs report that they have published all information for five data types. These are: daily available firm and interruptible capacity (C3), maximum technical capacity (C1), daily prompt allocation information for each shipper (F2), historical gas flow database (F4) and on the probability of interruption (C2). Annex 2 of this report provides a detailed overview of implementation progress.

	(C1) Max tech. capacity	(C2) Inter-ruption	(C3) Daily comm. firm and inter-ruptible capacity	(F1) Daily flow/ aggregate allocation	(F2) Daily prompt allocation info.	(F3) Daily aggregate day-ahead nomination	(F4) Historic gas flow database
E.ON GT	in place	in place	in place	in place	in place	in place	in place
Fluxys	in place	in place	in place	in place	in place	in place	in place
Svenska Kraftnät					in place	in place	
RWE TNG	in place	in place	in place	in place	in place	in place	in place
National Grid	in place	in place	in place	in place	in place	in place	in place
IUK	in place	in place	in place	in place	in place	in place	in place
Gaslink	in place	in place	in place	in place	in place	in place	in place
WINGAS TRANSPORT	in place	in place	in place	Oct. 2009	in place	Oct. 2009	in place
Ontras	in place	In place	in place	In place	in place	In place	In place
GRTgaz	in place	in place	in place	in place	in place	July 2009	in place
Energinet.dk	in place	in place	in place	May 2009	in place	May 2009	in place
Gasunie	in place	in place	in place	in place	in place	Dec. 2009	in place
DEP	in place	in place	in place	in place	in place	Dec. 2009	in place
Swedegas	in place		in place	in place			in place
GRTgaz DT	in place	in place	in place	in place	in place	No date	in place
GTS	in place	in place	in place	in place	in place	in place	in place
BBL	in place	in place	in place	In place	in place	Oct. 2009	In place

Table 5 – Final implementation status for individual data types and TSOs

There are two data types where not all TSOs have reported publishing the information specified as part of the voluntary project:

a) Daily aggregate day-ahead nomination information (F3) is currently not published by seven TSOs;

b) Daily aggregate gas flow information (F1) is currently not published by two TSOs;

Delays have been experienced for the publication of daily flow and interruption information (F1) and shipper's aggregate day-ahead nominations (F3). Implementation has been delayed because these data types are viewed as potentially commercially confidential (day-ahead nomination information) or require more frequent and accurate updating (daily gas flow information).

Where the publication of information has been delayed, TSOs have committed to dates to publish this information by December 2009. Table 5 provides an overview of the dates that TSOs have committed to where there have been delays. The next section provides a more detailed explanation where implementation has been delayed.

8.2.1 Aggregate daily flow and interruptions (F1)

Information on gas flows is crucial for understanding system operation, use of existing network capacity and to attach a fair and efficient value to capacity products offered by TSOs.

The number of TSOs that report publishing information for this data type has increased from four to fourteen. Two TSOs responded that they have not yet published the specified information for this data type. We expect all TSOs to confirm to stakeholders in the GRI NW when this information has been published.

WINGAS TRANSPORT

In 2008 WINGAS TRANSPORT committed to publishing this information by December 2008 subject to it being able to resolve confidentiality concerns raised by its shippers. WINGAS TRANSPORT now states that this is no longer an obstacle for publication and that it will publish this information after the planned merging of its balancing zone. WINGAS TRANSPORT plans to publish the information in October 2009.

Energinet.dk

Energinet.dk originally committed to publishing this information by April 2008. Energinet.dk has now confirmed that information on daily gas flow will be published in May 2009. Currently Energinet.dk publish this information on a monthly basis and Energinet.dk will increase the frequency of publication to daily.

8.2.2 Daily aggregate day-ahead nominations (F3)

The publication of information on daily aggregate day-ahead nominations enables network users to make an assessment of available capacities at each interconnection point. Daily publication will enable network users to adjust their nominations to make use of unused capacity and utilise exising capacity efficiently.

The number of TSOs that report publishing information on this data type has increased from two to nine. Seven TSOs responded to the questionnaire for the final project milestone that they do not publish information for this data type. We expect all TSOs to confirm to stakeholders in GRI NW when this information has been published.

WINGAS TRANSPORT

In 2008 WINGAS TRANSPORT committed to publishing this information by December 2008 subject to it being able to resolve confidentiality concerns raised by its shippers. WINGAS TRANSPORT now states that this is no longer an obstacle for publication and that it will publish this information after the planned merging of its balancing zone. WINGAS TRANSPORT plans to publish the information in October 2009.

GRTgaz

At the start of the project GRTgaz did not commit to a specifc date for publishing this information. This is because GRTgaz needed to consult with its shippers before it could make a specific commitment. GRTgaz has now reported that it has been able to gain approval from its shippers for publishing information for this data type. GRTgaz stated that it will publish this information in July 2009.

Gasunie Deutschland

Gasunie Deutschland made an initial commitment to publish this information by October 2008. Subsequently, Gasunie Deutschland delayed publication to the end of March 2009. However, due to other national requirements, such as the merger of balancing zones, Gasunie Deutschland was unable to meet this deadline.

Gasunie Deutschland has reported that it will now publish daily aggregate day-ahead nominations by December 2009. Furthermore, Gasunie Deutschland is planning to publish this data within the scope of the Gas Transmission Europe plus (GTE+) project to develop a European Transparency Platform (www.gas-road.eu).

Dong Energy Pipelines (DEP)

Gasunie Deutschland and DEP are undertaking joint publication of this information with Gasunie Deutschland acting as the service provider. Therefore DEP are subject to the same implementation delays.

GRTgaz DT

At the start of the project GRTgaz DT did not commit to a specific date for publishing this information. GRTgaz DT stated that this was because publishing day ahead nomination information would require major IT changes and it was not certain that it would be able to publish the information in 2008. GRTgaz DT has stated that it will not be able to publish the information before June 2009.

BBL

BBL joined the transmission transparency project before the second project milestone in september 2008. On joining the project BBL did not commit to a specific date because publishing this information would require significant IT changes. BBL have now responded that they will be able to publish this information before 31 December 2009.

Energinet.dk

Energinet.dk originally did not commit to a specific date for publishing this information. Energinet.dk has now confirmed that information on daily gas flow will be published in May 2009.

9 Conclusion

The publication of this report marks the end of phase one of the GRI NW transmission transparency project. Where TSOs have delayed publication of information Ofgem will continue to monitor and report on the progress.

There are ten TSOs (E.ON Gastransport, Fluxys, RWE Transportnetz Gas, National Grid, GTS, Interconnector UK, Gaslink, Ontras, Swedegas and Svenska Kraftnät) that now report publishing information on all seven data types specified as part of the transmission transparency project. At the start of the project only Interconnector UK and GTS reported that they already published all the specified information.

There are now five data types where all TSOs report publishing all specified information. These are the maximum technical capacity at each cross-border interconnection point (C1), daily updates of commercial firm and interruptible capacity availability (C3), daily prompt allocation information sent on a confidential basis to each shipper (F2), a historic gas flow database (F4), and information on the probability of interruption (C2).

Five TSOs (BBL, DEP, Gasunie Deutschland, Ontras, GRTgaz and GRTgaz DT) have reported delays in publishing one data type and two TSOs (Energinet.dk and WINGAS TRANSPORT) have reported delays in publishing two data types. The two data for which TSOs have delayed publication are daily flows and interruptions (F1) updated on a daily basis and day-ahead publication of aggregate nominations (F3).

Where there have been delays TSOs have committed to specific dates in 2009 to publish the outstanding information. GRTgaz DT has stated that it will not be able to publish information on aggregate day ahead nominations before June 2009. However, GRTgaz DT has not yet committed to a specific date for the publication of this information.

Over the course of the project the number of cross-border interconnections points subject to the LTTS rule has decreased from 35 to 20. The rule allows publication of information to be restricted at interconnection points where less than three shippers operate. The third package will delete the rule.

Annex 1 – Data definitions

The following table provides specifications for the information to be released on each data type as described in the TSO project plan and agreed at the September workshop in London.

<table>
<tr><th colspan="2">Data type definitions</th></tr>
<tr><td colspan="2">

The provision of the following information refers to cross-border interconnection points
D + 1: the gas day after the relevant day
D – 1: the gas day before the relevant day
All information are published on the TSOs‘ websites [except for shipper specific information (F2)]
Hourly\Daily Information on a daily basis (d+1) dependent on market arrangements

</td></tr>
<tr><td rowspan="6">Capacity information</td><td>(C1) Max technical capacity of the transmission system</td></tr>
<tr><td>

Static data which only varies with additional investment, transmission asset expiry etc...
Expected to be updated on a periodic/annual basis following a permanent change in maximum technical capability
Each TSO will publish a definition of the provided data according to the relevant market rules

</td></tr>
<tr><td>(C2) Level of interruption probability</td></tr>
<tr><td>

Information on previous interruptions may indicate the chance of being interrupted in the future
TSOs are/will be publishing following Information:

Maintenance plans
Information on flows and previous interruptions (see F1)
Booked firm and interruptible capacities (see C3)
Available firm and interruptible capacities (see C3)
Day-ahead nominations (see F3)

TSOs invite market participants to define a “traffic light” definition based on the information above
Individual plans will show current release and potential enhancement

</td></tr>
<tr><td>(C3) Daily commercial firm and interruptible capacity</td></tr>
<tr><td>

Dynamic data reflecting the levels of booked and available capacity
Aggregate values of each of the following capacity categories, as applicable, for the relevant gas day:

Booked firm entry capacity
Booked firm exit capacity
Booked interruptible entry capacity
Booked interruptible exit capacity
Available firm entry capacity
Available firm exit capacity
Available interruptible entry capacity
Available interruptible exit capacity

Updated Information on a daily basis dependent on market arrangements

</td></tr>
</table>

Data type definitions	
Flow Information	(F1) Daily flow and interruptions • Dynamic data reflecting actual flows and interruptions • Aggregate gas flow / aggregate confirmed nominations in each direction • Aggregate gas flow interruptions initiated by TSO in each direction • Published D + 1
	(F2) Daily prompt allocation information to each shipper • Dynamic data reflecting flow allocation • provided daily via private website or EDIGAS/ other direct communication links • For each shipper, their individual allocation of gas in each direction (where applicable) • Published D + 1
	(F3) Daily aggregate day-ahead nominations • Dynamic data reflecting aggregate nominations day-ahead • Sum of all nominations received by TSO at first gate closure • Test period to make sure market players' / TSOs' positions are not jeopardised • Published D – 1
	(F4) Historic gas flow information database • Historic repository of information specified in 'Daily flow and interruptions' (F1)

Table 6 – Agreed data specifications

Annex 2 – Overall Implementation progress

Overview: Status May 2009

	E.ON GT	Fluxys	Svenska Kraftnät	RWE TNG	National Grid	Interconnector	Gas-link	WINGAS Transport	Ontras	GRTgaz	Energinet.dk	Gasunie	DEP	Swedegas	GRT-gaz DT	GTS	BBL
(C1) Max technical capacity	in place	in place		in place	in place	in place	in place	in place	in place	in place	in place	in place	in place	in place	in place	in place	in place
(C2) Interruption	in place	in place		in place	in place	in place	in place	in place	In place	in place	in place	in place	in place		in place	in place	in place
(C3) Daily commercial firm and interruptible capacity	in place	in place		in place	in place	in place	in place	in place	in place	in place	in place	in place	in place	in place	in place	in place	in place
(F1) Daily flow / aggregated Allocation	in place	in place		in place	in place	in place	in place	OCT 2009	In place	in place	MAY 2009	in place	in place	in place	in place	in place	In place
(F2) Daily prompt allocation information	in place	in place	in place	in place	in place	in place	in place	in place	in place	in place	in place	in place	in place		in place	in place	in place
(F3) Daily aggregate day-ahead nominations	in place	in place	in place	in place	in place	in place	in place	OCT 2009	In place	JUL 2009	MAY 2009	DEC 2009	DEC 2009		No date	in place	DEC 2009
(F4) Historic gas flow information database	in place	in place		in place	in place	in place	in place	in place	In place	in place	in place	in place	in place	in place	in place	in place	In place
Number of IPs	22	19	1	5	8	4	1	8	3	9	6	7	2	1	5	25	4
3 minus rule IPs	0	5	0	3	0	0	0	3	3	0	0	0	0	0	0	12	0

TSOs report published
Less than three shippers
Not applicable
Specific date
Not committed to date

Overview: Status October 08

	E.ON GT	Fluxys	Sven. Kraft.	RWE TNG	Nat. Grid	Interconnector	Gaslink	WINGAS Transport	Ontras	GRTgaz	Energinet	Gasunie	DEP	Swedegas	GRTgaz DT	GTS	BBL
(C1) Max technical capacity	in place	in place	N/A	in place	in place	in place	in place	in place	in place	in place	in place	in place	in place	final	in place	in place	in place
(C2) Interruption	in place	2009	N/A	in place	in place	in place		in place	3 - rule	in place	in place	in place	in place	final	in place	in place	in place
(C3) Daily commercial firm and interruptible capacity	in place	in place	N/A	in place	in place	in place	in place	in place	in place	in place	in place	in place	in place	final	in place	in place	final
(F1) Daily flow / aggregated Allocation	in place	2009	N/A	in place	in place	in place	in place	final	3 - rule	in place	final	in place	in place	final	in place	in place	final
(F2) Daily prompt allocation information	in place	in place	in place	in place	in place	in place	in place	in place	in place	in place	in place	in place	in place	N/A	in place	in place	in place
(F3) Daily aggregate day-ahead nominations	in place	2009	final	in place	2009	in place	in place	final	3- rule	2009	2009	final	final	N/A	2009	in place	2009
(F4) Historic gas flow information database	in place	in place	N/A	in place	in place	in place	in place	in place	3 - rule	in place	in place	in place	in place	final	in place	in place	final
Number of IPs	22	23	1	5	8	4	1	8	3	9	6	7	2	1	5	25	4
3 minus rule IPs	0	8	0	3	0	0	0	3	3	0	0	0	0	0	0	12	0

December 2008	Final	Existing before October 2008	In place
Later Publication		Three minus or not required	

Overview: Status July 08

	E.ON GT	Fluxys	Svenska Kraftnät	RWE TNG	National Grid	Interconnector	Gasline k	WINGAS Transport	Ontras	GRTgaz	Energinet.dk	Gasunie	DEP	Swedegas	GRT-gaz DT	GTS	BBL
(C1) Max technical capacity	in place	in place		in place	in place	in place	in place	in place	in place	in place	in place	in place	in place	later	in place	in place	in place
(C2) Interruption	in place	final		in place	in place	in place	later			in place	later	later	later	later	in place	in place	in place
(C3) Daily commercial firm and interruptible capacity	in place	in place		later	in place	in place	in place	in place	in place	in place	in place	in place	in place	later	in place	in place	final
(F1) Daily flow / aggregated Allocation	in place	in place		later	in place	in place	later	final		in place	final	in place	in place	later	in place	in place	final
(F2) Daily prompt allocation information	in place	in place	in place	in place	in place	in place	in place	in place	in place	in place	in place	in place	in place		in place	in place	in place
(F3) Daily aggregate day-ahead nominations	in place	final	final	later	final	in place	later	final				later	later			in place	
(F4) Historic gas flow information database	in place	in place		later	in place	in place	later	in place		in place	in place	in place	in place	later	in place	in place	final

October 2008	later	Existing before May 2008	in place
December 2008	final	no answer	

Overview: Status 2007

	E.ON GT	Fluxys	Svenska Kraftnät	RWE TNG	National Grid	Inter-connector	Gaslink	WINGAS Transport	Ontras	GRT gaz	Energinet.dk	Gasunie	DEP	Swedegas	GRTgaz DT	GTS	BBL
(C1) Max technical capacity	in place	earlier		in place	in place	in place	earlier	in place	in place	in place	earlier	in place	in place	earlier	in place	in place	in place
(C2) Interruption	later	final		final	in place	in place	later		earlier	in place	earlier	later	later	earlier	in place	in place	final
(C3) Daily commercial firm and interruptible capacity	in place	earlier		later	in place	in place	earlier	in place	in place	in place	earlier	in place	in place	later	in place	in place	in place
(F1) Daily flow / aggregated Allocation	earlier	earlier	final	later	in place	in place	later	earlier	earlier	in place	earlier	earlier	earlier	earlier	earlier	in place	final
(F2) Daily prompt allocation information	earlier	in place	final	in place	in place	in place	in place	in place	in place	in place	in place	in place	in place		in place	in place	in place
(F3) Daily aggregate day-ahead nominations	later	final	final	later	final	in place	later	earlier	earlier			later	earlier			in place	
(F4) Historic gas flow information database	later	in place	final	later	in place	in place	later	earlier	earlier	in place	in place	earlier	later	later	in place	in place	final

April 2008	earlier	Existing before project start	
October 2008	later	no answer	
December 2008	final		

Annex 3 – Cross-border interconnection points

No.	Interconnector Name	Type	Connected TSO	Confidential	Decision	C1	C2	C3	F1	F2	F3	F4
TSO 1: Swedegas												
1.	Dragør	Exit	Energinet.dk	No	N/A	Yes		Yes	Yes			Yes
TSO 2: Svenska Kraftnät												
1.	Dragør	Entry	Energinet.dk	No	N/A					Yes	Yes	
TSO 3: Gaslink												
1.	Moffat	Entry	National Grid	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TSO 4: National Grid												
1.	Bacton	Entry	Interconnector`	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2.	Bacton	Exit	Interconnector`	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3.	Bacton	Entry	BBL	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4.	Bacton	Exit	BBL	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5.	Moffatt	Exit	Gaslink	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6.	Easington	Entry	Gassco/Centrica	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7.	Milford Haven	Entry	Dragon/South Hook	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8.	Isle of Grain	Entry	Grain LNG	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TSO 5: Interconnector UK												
1.	IZT	Entry	Fluxys	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2.	IZT	Exit	Fluxys	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3.	Bacton	Entry	National Grid	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes

No.	Interconnector Name	Type	Connected TSO	Confidential	Decision	C1	C2	C3	F1	F2	F3	F4
4.	Bacton	Exit	National Grid	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TSO 6: Energinet.dk												
1.	Nybro	Entry	DONG Energy	No	N/A	Yes	Yes	Yes	MAY 2009	Yes	MAY 2009	Yes
2.	Ellund	Entry	E.ON GT, Gasunie, Dong	No	N/A	Yes	Yes	Yes	MAY 2009	Yes	MAY 2009	Yes
3.	Dragør	Entry	Svenska Kraftnät and Swedegas	No	N/A	Yes	Yes	Yes	MAY 2009	Yes	MAY 2009	Yes
4.	Nybro	Exit	DONG Energy	No	N/A	Yes	Yes	Yes	MAY 2009	Yes	MAY 2009	Yes
5.	Ellund	Exit	E.ON GT, Gasunie, Dong	No	N/A	Yes	Yes	Yes	MAY 2009	Yes	MAY 2009	Yes
6.	Dragør	Exit	Svenska Kraftnät and Swedegas	No	N/A	Yes	Yes	Yes	MAY 2009	Yes	MAY 2009	Yes
TSO 7: GTS												
1.	Hilvarenbeek	Exit	Fluxys	Yes	Yes	No	Yes	In part	No	Yes	No	No
2.	Zevenaar	Exit	EGT	Yes	Yes	No	Yes	In part	No	Yes	No	No
3.	Zandvliet	Exit	Fluxys	Yes	Yes	No	Yes	In part	No	Yes	No	No
4.	OudeStatenzijl(EWE-G)	Exit	EWE	Yes	Yes	No	Yes	In part	No	Yes	No	No
5.	Obbicht	Exit	Fluxys	Yes	Yes	No	Yes	In part	No	Yes	No	No
6.	Tegelen	Exit	EGT	Yes	Yes	No	Yes	In part	No	Yes	No	No
7.	Dinxperlo	Exit	RWE	Yes	Yes	No	Yes	In part	No	Yes	No	No
8.	Haanrade	Exit	RWE	Yes	Yes	No	Yes	In part	No	Yes	No	No
9.	Vlieghuis	Exit	RWE	Yes	Yes	No	Yes	In part	No	Yes	No	No
10.	Zandvliet	Exit	Fluxys	Yes	Yes	No	Yes	In part	No	Yes	No	No
11.	Oude Statenzijl (DgasH)	Entry	D-Gas	Yes	Yes	No	Yes	In part	No	Yes	No	No
12.	Oude Statenzijl (DgasH)	Exit	D-Gas	Yes	Yes	No	Yes	In part	No	Yes	No	No
13.	Emden	Entry	Gassco	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
14.	Julianadorp (BBL)	Exit	BBL	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
15.	Winterswijk	Exit	EGT	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes

No.	Interconnector Name	Type	Connected TSO	Confidential	Decision	C1	C2	C3	F1	F2	F3	F4
16.	Bocholtz	Exit	EGT	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
17.	s 'Gravenvoeren	Exit	Fluxys	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
18.	Oude Statenzijl (Ruhrgas-H)	Entry	EGT	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
19.	Oude Statenzijl (Ruhrgas-H)	Exit	EGT	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
20.	Oude Statenzijl (Wingas-H)	Entry	Wingas transport	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
21.	Oude Statenzijl (Wingas-H)	Exit	Wingas transport	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
22.	Oude Statenzijl(BEB-G)	Exit	Gasunie	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
23.	Oude Statenzijl(BEB-H)	Entry	Gasunie	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
24.	Oude Statenzijl(BEB-H)	Exit	Gasunie	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
25.	Zelzate	Entry	Fluxys	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TSO 8: Fluxys												
1.	Zeebrugge ZPT (Zeepipe Terminal)	Entry	Gassco	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2.	Zeebrugge IZT (Interconnector)	Entry	Interconnector UK	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3.	Zeebrugge IZT (Interconnector)	Exit	Interconnector UK	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4.	Zelzate 1 (Gas Transport Services)	Exit	GTS	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5.	Zelzate 2 (Zebra Gasnetwerk)	Exit	Zebra	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6.	Eynatten 1 (Wingas Transport)	Entry	Wingas transport	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7.	Eynatten 1 (Wingas Transport)	Exit	Wingas transport	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8.	Eynatten 2 (EON Gastransport)	Entry	EON GT/RWE Transportnetz	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes

No.	Interconnector Name	Type	Connected TSO	Confidential	Decision	C1	C2	C3	F1	F2	F3	F4
9.	Eynatten 2 (EON Gastransport)	Exit	EON GT/RWE Transportnetz	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10.	's Gravenvoeren + Dilsen	Entry	GTS	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
11.	Blaregnies SEGEO	Exit	GRTgaz	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12.	Blaregnies TROLL	Exit	GRTgaz	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
13.	Zeebrugge LNG Terminal	Entry	Fluxys	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
14.	Poppel + Zandvliet L	Entry	GTS	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
15.	Blaregnies L	Exit	GRTgaz	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
16.	Zandvliet H	Entry	GTS	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TSO 9: DEP												
1.	Ellund	Entry	Energinet.dk	No	N/A	Yes	Yes	Yes	Yes	Yes	DEC 2009	Yes
2.	Ellund	Exit	Energinet.dk	No	N/A	Yes	Yes	Yes	Yes	Yes	DEC 2009	Yes
TSO 10: Gasunie Deutschland												
1.	Ellund (H-Gas)	Entry	Energinet.dk	No	N/A	Yes	Yes	Yes	Yes	Yes	DEC 2009	Yes
2.	Emden - EPT1 (H-Gas)	Entry	Gassco AS	No	N/A	Yes	Yes	Yes	Yes	Yes	DEC 2009	Yes
3.	Emden - NPT (H-Gas)	Entry	Gassco AS	No	N/A	Yes	Yes	Yes	Yes	Yes	DEC 2009	Yes
4.	Oude Statenzijl (H-Gas)	Entry	GTS	No	N/A	Yes	Yes	Yes	Yes	Yes	DEC 2009	Yes
5.	Ellund (H-Gas)	Exit	Energinet.dk	No	N/A	Yes	Yes	Yes	Yes	Yes	DEC 2009	Yes
6.	Oude Statenzijl (H-Gas)	Exit	GTS	No	N/A	Yes	Yes	Yes	Yes	Yes	DEC 2009	Yes
7.	Oude Statenzijl (L-Gas)	Entry	GTS	No	N/A	Yes	Yes	Yes	Yes	Yes	DEC 2009	Yes

No.	Interconnector Name	Type	Connected TSO	Confidential	Decision	C1	C2	C3	F1	F2	F3	F4
TSO 11: E.ON GT												
1.	Waidhaus	Entry	Transgas	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2.	Bocholtz	Entry	Gas Transport Services	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3.	Emden NPT	Entry	Gassco	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4.	Dornum	Entry	Gassco	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5.	Emden EPT	Entry	Gassco	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6.	Oberkappel	Entry	OMV	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7.	Ellund	Entry	Energinet	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8.	Wallbach	Entry	Transitgas	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9.	Eynatten/Raeren	Entry	Fluxys	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10.	Oude Statenzijl	Entry	Gas Transport Services	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
11.	Medelsheim	Entry	GRTgaz	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12.	Oude Statenzijl 2	Entry	Gas Transport Services	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
13.	Wallbach	Exit	Transitgas	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
14.	Eynatten/Raeren	Exit	Fluxys	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
15.	OudeStatenzijl	Exit	Gas Transport Services	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
16.	Medelsheim	Exit	GRTgaz	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
17.	Ellund	Exit	Energinet	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
18.	Bocholtz	Exit	Gas Transport Services	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
19.	Emden NPT	Exit	Gassco	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
20.	Emden EPT	Exit	Gassco	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
21.	Oberkappel	Exit	OMV	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
22.	Oude Statenzijl 2	Exit	Gas Transport Services	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TSO 12: RWE Transportnetz Gas												

No.	Interconnector Name	Type	Connected TSO	Confidential	Decision	C1	C2	C3	F1	F2	F3	F4
1.	Emden EPT	Entry	Gassco	Yes	Yes	No	Yes	No	No	Yes	No	No
2.	Emden NPT	Entry	Gassco	Yes	Yes	No	Yes	No	No	Yes	No	No
3.	Eynatten (Lichtenbusch	Entry	Fluxys	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4.	Zevenaar	Entry	Gas Transport Services	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5.	Haanrade	Entry	Gas Transport Services	Yes	Yes	No	Yes	No	No	Yes	No	No
TSO 13: WINGAS TRANSPORT												
1.	Bunde	Entry	GTS	No	N/A	Yes	Yes	Yes	OCT 2009	Yes	OCT 2009	Yes
2.	Eynatten	Entry	Fluxys	No	N/A	Yes	Yes	Yes	OCT 2009	Yes	OCT 2009	Yes
3.	Mallnow	Entry	EuRoPol GAZ	Yes	Yes	No	Yes	Yes	No	Yes	No	Yes
4.	Olbernhau	Entry	RWE Transgas Net	Yes	Yes	No	Yes	Yes	No	Yes	No	Yes
5.	Überackern - IP not directly connected to Wingas Transport grid	Entry	OMV	No	N/A	Yes	Yes	Yes	Date Pend-ing	Yes	Date Pend-ing	Yes
6.	Bunde	Exit	GTS	No	N/A	Yes	Yes	Yes	OCT 2009	Yes	OCT 2009	Yes
7.	Eynatten	Exit	Fluxys	No	N/A	Yes	Yes	Yes	OCT 2009	Yes	OCT 2009	Yes
8.	Olbernhau	Exit	RWE Transgas Net	Yes	Yes	No	Yes	Yes	No	Yes	No	Yes
TSO 14: Ontras												
1.	Deutschneudorf	Entry	RWE Transgas Net	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2.	Deutschneudorf	Exit	RWE Transgas Net	Yes	Yes	Yes	No	Yes	No	Yes	No	No
3.	Lasow	Exit	GAZ-SYSTEM	Yes	Yes	Yes	No	Yes	No	Yes	No	No

No.	Interconnector Name	Type	Connected TSO	Confidential	Decision	C1	C2	C3	F1	F2	F3	F4
TSO 15: GRTgaz DT												
1.	Oberkappel	Entry	BOG	No	N/A	Yes	Yes	Yes	Yes	Yes	No date	Yes
2.	Oberkappel	Exit	BOG	No	N/A	Yes	Yes	Yes	Yes	Yes	No date	Yes
3.	Waidhaus	Entry	RWE Transgas Net	No	N/A	Yes	Yes	Yes	Yes	Yes	No date	Yes
4.	Medelsheim	Entry	GRTGaz	No	N/A	Yes	Yes	Yes	Yes	Yes	No date	Yes
5.	Medelsheim	Exit	GRTGaz	No	N/A	Yes	Yes	Yes	Yes	Yes	No date	Yes
TSO 16: GRTgaz												
1.	Dunkerque	Entry	Gassco	No	N/A	Yes	Yes	Yes	Yes	Yes	JUL 2009	Yes
2.	Taisnières L	Entry	Fluxys	No	N/A	Yes	Yes	Yes	Yes	Yes	JUL 2009	Yes
3.	Taisnières H	Entry	Fluxys	No	N/A	Yes	Yes	Yes	Yes	Yes	JUL 2009	Yes
4.	Taisnières H	Exit	Fluxys	No	N/A	Yes	Yes	Yes	Yes	Yes	JUL 2009	Yes
5.	Obergailbach	Entry	GRTgaz DT + E On Gastransport	No	N/A	Yes	Yes	Yes	Yes	Yes	JUL 2009	Yes
6.	Obergailbach	Exit	GRTgaz DT + E On Gastransport	No	N/A	Yes	Yes	Yes	Yes	Yes	JUL 2009	Yes
7.	Oltingue	Exit	ENI CH gas and power + Swissgas	No	N/A	Yes	Yes	Yes	Yes	Yes	JUL 2009	Yes
8.	Oltingue	Entry	ENI CH gas and power + Swissgas	No	N/A	Yes	Yes	Yes	Yes	Yes	JUL 2009	Yes
9.	Montoir de Bretagne (LNG)	Entry	Gaz de France	No	N/A	Yes	Yes	Yes	Yes	Yes	JUL 2009	Yes

No.	Interconnector Name	Type	Connected TSO	Confidential	Decision	C1	C2	C3	F1	F2	F3	F4
TSO 17: BBL												
1.	BBL Julianadorp	Entry	GTS	No		Yes	Yes	Yes	Yes	Yes	DEC 2009	Yes
2.	BBL Julianadorp	Exit	GTS	No		Yes	Yes	Yes	Yes	Yes	DEC 2009	Yes
3.	BBL Bacton	Entry	National Grid	No		Yes	Yes	Yes	Yes	Yes	DEC 2009	Yes
4.	BBL Bacton	Exit	National Grid	No		Yes	Yes	Yes	Yes	Yes	DEC 2009	Yes

Annex 4 – TSO websites links

TSO: Interconnector (UK) Limited		
Data Type	Link	Date to be published
(C1) Max technical capacity	http://www.interconnector.com/Commercial/primarycap.htm	Published
(C2) Probability of interruption	Planned maintenance information: http://www.interconnector.com/onlineservices/shutdowndates.htm Unplanned interruption information (press and news updates): http://www.interconnector.com/mediacentre/pressreleases.htm http://www.interconnector.com/index.html *Have not had unplanned interruption since 2005	Published
(C3) Daily commercial firm and interruptible capacity	http://www.interconnector.com/Commercial/primarycap.htm The footnote provides an indication of the interruptible capacity that will likely be available on any given day. As interruptible capacity is typically sold on a day ahead basis, dynamic information regarding the availability of interruptible capacity is provided via ISIS: http://www.interconnector.com/faqs.htm	Published
(F1) Daily flow/aggregated information	http://www.interconnector.com/iuk/onlinepage	Published
(F3) Daily aggregate day ahead nominations	http://www.interconnector.com/iuk/onlinepage	Published
(F4) Historic gas flow database	http://www.interconnector.com/onlineservices/historicflows.htm	Published

TSO: National Grid		
Data Type	Link	Date to be published
(C1) Max technical capacity	http://www.nationalgrid.com/uk/Gas/TYS/ Click on "Ten Year Statement 2007 Charts" and then "Download the article here" Information on peak forecasts for entry exit point is available in "annex 2" of the spreadsheet (via "menu" tab) http://www.nationalgrid.com/NR/rdonlyres/ABA258D7-17D2-4357-BCF7-C9C492201806/22104/TYS_2007Charts.xls Or http://www.nationalgrid.com/uk/gas/data/cmr Click on "Long Term Entry Capacity Summary Report - Download excel spreadsheet" http://www.nationalgrid.com/NR/rdonlyres/4A5BC67E-65A1-4EC8-BFB8-8CCCBABE5131/26740/AggregatecapacitySoldbyASEP_summary010708.xls	Published
(C2) Probability of interruption	http://www.nationalgrid.com/NR/rdonlyres/4DD86869-3D51-42F2-9905-A35D4452AE0E/18874/Summer2007FinalMaintenanceProgrammeV43rdAug2007.pdf http://www.nationalgrid.com/NR/rdonlyres/A7CD68A5-DBB0-4822-	Published

	ABF5-0EEFCDAC7C4C/20423/SummerMaintenance2008SeptemberUpdate.pdf http://www.nationalgrid.com/uk/Gas/Data/EDR/After/NTSEntryEndofDayFlow.htm	
(C3) Daily commercial firm and interruptible capacity	http://www.nationalgrid.com/uk/gas/Data/CMR http://www.nationalgrid.com/uk/Gas/Data/CDR/ http://www.nationalgrid.com/uk/Gas/Data/capacitys/	Published
(F1) Daily flow/aggregated information	http://www.nationalgrid.com/uk/Gas/Data/EFD/ http://www.nationalgrid.com/uk/Gas/Data/EDR/After/NTSEntryEndofDayFlow.htm http://www.nationalgrid.com/uk/Gas/Data/CDR/After/CONH.htm	Published
(F3) Daily aggregate day ahead nominations	http://www.nationalgrid.com/uk/Gas/Data/News/dayaheadgasflow.htm	Published
(F4) Historic gas flow database	http://www.nationalgrid.com/uk/Gas/Data/misc/ http://www.nationalgrid.com/uk/Gas/Data/EDR/After/NTSEntryEndofDayFlow.htm	Published

TSO: Energinet.dk		
Data Type	Link	Date to be published
(C1) Max technical capacity	https://selvbetjening.energinet.dk/en/menu/Frontpage.htm	Published
(C2) Probability of interruption	The probability of being interrupted is reflected in the tariff. There are two levels of interruptible capacity. This means that the price reflects the general risk: http://www.energinet.dk/en/menu/Market/Tariffs+and+prices/Gas+-+Transmission+tariffs/Gas+-+Interruptible+tariffs/Interruptible+tariffs.htm How much interruptible capacity there has been booked, and the gas flow per day from the previous month (this will be updated with d-1 data in early 2009) are also published, giving the shippers a good idea of the chance of interruption. See also: https://selvbetjening.energinet.dk/en/menu/PublicData/HistoricalFutureCapacity/HistoricalFutureCapacity.htm; and, http://www.energinet.dk/en/menu/Market/Gas+market/Gas+market+reports/Gas+market+report.htm	Published
(C3) Daily commercial firm and interruptible capacity	https://selvbetjening.energinet.dk/en/menu/Frontpage.htm	Published
(F1) Daily flow/aggregated information		May 2009
(F3) Daily aggregate day ahead nominations		May 2009
(F4) Historic	http://www.energinet.dk/en/menu/Market/Trading/Gas+-	Published

gas flow database	Transmission+capacity/Gas+-+Transmission+capacity.htm	

TSO: Dong Energy Pipelines		
Data Type	Link	Date to be published
(C1) Max technical capacity	http://www.dongenergy-pipelines.de/en/capacities/Pages/Free%20capacities.aspx http://www.dongenergy-pipelines.de/SiteCollectionDocuments/PDF_filer/Overview_Capacities.pdf	Published
(C2) Probability of interruption	http://www.dongenergy-pipelines.de/en/about%20us/Pages/Details%20of%20the%20pipeline%20system.aspx	Published
(C3) Daily commercial firm and interruptible capacity	http://www.dongenergy-pipelines.de/en/capacities/Pages/Free%20capacities.aspx http://www.dongenergy-pipelines.de/SiteCollectionDocuments/PDF_filer/Overview_Capacities.pdf Registered users can also log in into the online booking system. The website http://www.dongenergy-pipelines.de/en/online%20booking/Pages/index.aspx provides a link to the website of the cooperation platform www.marktgebiete.com by use of the password the customer can log in and check available capacities and tariffs.	Published
(F1) Daily flow/aggregated information	http://www.dongenergy-pipelines.de/en/capacities/Pages/Allocated_hourly_flows.aspx	Published
(F3) Daily aggregate day ahead nominations		December 2009
(F4) Historic gas flow database	http://www.dongenergy-pipelines.de/de/kapazitaten/Historische%20Lastflüsse/Pages/HistorischeLastflüsse.aspx	Published

TSO: Ontras		
Data Type	Link	Date to be published
(C1) Max technical capacity	www.marktgebiete.com/h-gas (Indicative value for max technical capacity available when “less than three shipper rule” does not apply) To access follow links: Market area information, Interactive Network Map, Select Network Point – click on details tab at bottom right hand side of page	Published
(C2) Probability of interruption	http://ontras.com/content/Unternehmen/Netz_Transparenz/Transparenz/Transparenz-Tool/index.html http://www.ontras.com/content_en/Unternehmen/Netz_Transparenz/Instandhaltungsreport/index.html	Published
(C3) Daily commercial firm	www.marktgebiete.com/h-gas	Published

and interruptible capacity	To access follow links: Market area information, Interactive Network Map, Select Network Point – click on details tab at bottom right hand side of page	
(F1) Daily flow/aggregated information	http://ontras.com/content/Unternehmen/Netz_Transparenz/Transparenz/Transparenz-Tool/index.html	Published
(F3) Daily aggregate day ahead nominations	www.ontras.com/portal/servlet/OpenPortal (provided on confidential basis to shippers – Login → Kundencenter → Abrechnungsdaten → Angebote/Daten) http://ontras.com/content/Unternehmen/Netz_Transparenz/Transparenz/Transparenz-Tool/index.html	Published
(F4) Historic gas flow database	http://ontras.com/content/Unternehmen/Netz_Transparenz/Transparenz/Transparenz-Tool/index.html	Published

TSO: RWE Transportnetz Gas		
Data Type	Link	Date to be published
(C1) Max technical capacity	http://www.rwetransportnetzgas.com/generator.aspx/homepage/netzzugang/netzinformation/language=en/id=195172/page.html	Published
(C2) Probability of interruption	http://www.rwetransportnetzgas.com/generator.aspx/homepage/netzzugang/netzinformation/baumassnahmen/language=en/id=278966/baumassnahmen.html	Published
(C3) Daily commercial firm and interruptible capacity	http://www.rwetransportnetzgas.com/generator.aspx/homepage/netzzugang/netzinformation/language=en/id=195172/page.html	Published
(F1) Daily flow/aggregated information	http://www.rwetransportnetzgas.com/generator.aspx/homepage/netzzugang/netzinformation/bba/language=en/id=494516/nominierung-allokation.html	Published
(F3) Daily aggregate day ahead nominations	http://www.rwetransportnetzgas.com/generator.aspx/homepage/netzzugang/netzinformation/bba/language=en/id=494516/nominierung-allokation.html	Published
(F4) Historic gas flow database	http://www.rwetransportnetzgas.com/generator.aspx/homepage/netzzugang/netzinformation/bba/language=en/id=494516/nominierung-allokation.html	Published

TSO: GRTgaz		
Data Type	Link	Date to be published
(C1) Max technical capacity	http://wwww.grtgaz.com/fileadmin/user_upload/Acheminement/Documents/FR/acheminement_capacites-reservation-court-long-terme.xls Excel file indicating the capacity of each IP (short and long term). The way capacities are calculated is explained in the Ten-year development	Published

	statement of GRTgaz for 2008-2017: (http://wwww.grtgaz.com/fileadmin/user_upload/Institutionnel/Documents/EN/projets-etude10ans_en.pdf)	
(C2) Probability of interruption	http://wwww.grtgaz.com/fileadmin/user_upload/Acheminement/Documents/EN/acheminement_capacites-interruptibles-en.pdf and http://wwww.grtgaz.com/en/home/transmission/engineering-work-schedules/ Document (pdf) on the availability of interruptible capacity + csv file on maintenance schedule	Published
(C3) Daily commercial firm and interruptible capacity	http://wwww.grtgaz.com/fileadmin/user_upload/Acheminement/Documents/FR/acheminement_capacites-reservation-court-long-terme.xls (and private website ECT) Excel file indicating the firm and interruptible capacity of all IPs (short and long term, updated minimum three times a month to be consistent with the open subscription periods) + click and book system on GRTgaz' private website (ECT) for daily available capacity	Published
(F1) Daily flow/aggregated information	http://wwww.grtgaz.com/module-chiffres/index.php and http://wwww.grtgaz.com/fileadmin/user_upload/Acheminement/Documents/EN/acheminement_capacites-interruptibles-en.pdf Available on the GRTgaz' key figures area + in the pdf document about the availability of the interruptible capacity	Published
(F3) Daily aggregate day ahead nominations		July 2009
(F4) Historic gas flow database	http://wwww.grtgaz.com/module-chiffres/index.php Available on the GRTgaz' key figures area, downloadable in xls or csv files	Published

TSO: Fluxys		
Data Type	Link	Date to be published
(C1) Max technical capacity	http://www.fluxys.com/en/Services/Transport/OperationalData/OperationalData.aspx	Published
(C2) Probability of interruption	http://www.fluxys.com/en/Services/Transport/OperationalData/DailyFlowData.aspx	Published
(C3) Daily commercial firm and interruptible capacity	http://www.fluxys.com/en/Services/Transport/OperationalData/OperationalData.aspx	Published
(F1) Daily flow/aggregated information	http://www.fluxys.com/en/Services/Transport/OperationalData/DailyFlowData.aspx	Published
(F3) Daily aggregate day ahead nominations	http://www.fluxys.com/en/Services/Transport/OperationalData/DailyFlowData.aspx	Published
(F4) Historic gas flow database	http://www.fluxys.com/en/Services/Transport/OperationalData/OperationalData.aspx	Published

TSO: Gaslink		
Data Type	Link	Date to be published
(C1) Max technical capacity	http://www.gaslink.ie/index.jsp?p=136&n=235 http://web1.bgegtms.ie/index.html	Published
(C2) Probability of interruption	Information on network development is available http://www.gaslink.ie/index.jsp?&p=93&n=138	Published
(C3) Daily commercial firm and interruptible capacity	http://www.gaslink.ie/index.jsp?p=136&n=235 http://web1.bgegtms.ie/index.html	Published
(F1) Daily flow/aggregated information	http://www.gaslink.ie/index.jsp?p=136&n=235 http://web1.bgegtms.ie/index.html	Published
(F3) Daily aggregate day ahead nominations	http://www.gaslink.ie/index.jsp?p=136&n=235 http://web1.bgegtms.ie/index.html	Published
(F4) Historic gas flow database	http://www.gaslink.ie/index.jsp?p=136&n=235 http://web1.bgegtms.ie/index.html	Published

TSO: GRTgaz DT		
Data Type	Link	Date to be published
(C1) Max technical capacity	http://www.gazdefrance-transport.de/content/kundenbereich/kapazitaetsinformationen/verfuegkapazitaeten/kapazitaetsuebersicht/index_neu_uk.php	Published
(C2) Probability of interruption	Maintenance schedules: http://www.gazdefrance-transport.de/content/kundenbereich/kapazitaetsinformationen/verfuegkapazitaeten/kapazitaetsuebersicht/index_neu_uk.php http://www.gazdefrance-transport.de/content/kundenbereich/kapazitaetsinformationen/lastfluesse/lfpage_uk.php?input_num=3&input_monat=06&input_jahr=2007&Submit=Go http://www.gazdefrance-transport.de/content/kundenbereich/kapazitaetsinformationen/instandhaltung/index_uk.php	Published
(C3) Daily commercial firm and interruptible capacity	http://www.gazdefrance-transport.de/content/kundenbereich/kapazitaetsinformationen/verfuegkapazitaeten/kapazitaetsuebersicht/index_uk.php	Published
(F1) Daily flow/aggregated information	http://www.gazdefrance-transport.de/content/kundenbereich/kapazitaetsinformationen/lastfluesse/lfpage_uk.php	Published
(F3) Daily	Would require major IT developments and process changes that	2009?

aggregate day ahead nominations	GRTgaz DT cannot implement before June 2009	
(F4) Historic gas flow database	http://www.gazdefrance-transport.de/content/kundenbereich/kapazitaetsinformationen/lastfluesse/lfpage_uk.php	Published

TSO: GTS		
Data Type	Link	Date to be published
(C1) Max technical capacity	Interconnection points: http://www.gastransportservices.com/shippers/transport/borderpoints_table/ Domestic entry points: http://www.gastransportservices.com/shippers/transport/entry_points/ Online availability checks and booking for all entry and exit points via OTIS (for registered users): http://www.gastransportservices.com/shippers/online/	Published
(C2) Probability of interruption	"GTS offers two different types of interruptible capacity to shippers (2.5% and 10%). Next to user specific data (see row 26), GTS provides for border points* the aggregated allocations and interruptions per network point. Aggregated allocations are given separately for entry, exit, backhaul, firm and interruptible. Non-fiscal data (user specific): https://otis.gastransportservices.nl/nimbus-im/ (requires login) "Fiscal data (user specific): https://otis.gastransportservices.nl/dialog/ (requires login) "border points*: http://www.gastransportservices.com/shippers/transport/borderpoints_table/	Published
(C3) Daily commercial firm and interruptible capacity	Border points (booked and available capacities plus other information): http://www.gastransportservices.com/shippers/transport/borderpoints_table/ Domestic entry points (available capacities): http://www.gastransportservices.com/shippers/transport/entry_points/	Published
(F1) Daily flow/aggregated information	"Next to user specific data (see row 26), GTS provides for border points* the aggregated allocations and interruptions per network point. Aggregated allocations are given separately for entry, exit, backhaul, firm and interruptible. Non-fiscal data (user specific): https://otis.gastransportservices.nl/nimbus-im/ (requires login) Fiscal data (user specific): https://otis.gastransportservices.nl/dialog/ (requires login) border points*: http://www.gastransportservices.com/shippers/transport/borderpoints_table/	Published
(F3) Daily aggregate day ahead nominations	GTS provides aggregate day ahead nominations at 15:00h and 22:00h http://www.gastransportservices.com/shippers/transport/borderpoints_table/	Published
(F4) Historic gas flow	"Next to user specific data (see row 26), GTS provides for border points* the aggregated allocations and interruptions per network point.	Published

database	Aggregated allocations are given separately for entry, exit, backhaul, firm and interruptible. Non-fiscal data (user specific): https://otis.gastransportservices.nl/nimbus-im/ (requires login) "Fiscal data (user specific): https://otis.gastransportservices.nl/dialog/ (requires login) "border points*: http://www.gastransportservices.com/shippers/transport/borderpoints_table/	

TSO: Gasunie Deutschland		
Data Type	Link	Date to be published
(C1) Max technical capacity	http://www.gasunie.de/cms/doc/doc_download.cfm?7CEDFC705056AD1948723C7FFAB9E6FC	Published
(C2) Probability of interruption	http://www.gasunie.de/cms/index.cfm?uuid=0A776D825056AD194879637CB97DC89B&o_lang_id=2	Published
(C3) Daily commercial firm and interruptible capacity	http://www.gasunie.de/cms/doc/doc_download.cfm?7CEDFC705056AD1948723C7FFAB9E6FC	Published
(F1) Daily flow/aggregated information	http://www.gasunie.de/statistic_data_tr2006/index_en.cfm	Published
(F3) Daily aggregate day ahead nominations		December 2009
(F4) Historic gas flow database	http://www.gasunie.de/statistic_data_tr2006/index_en.cfm	Published

TSO: WINGAS TRANSPORT		
Data Type	Link	Date to be published
(C1) Max technical capacity	http://wtkg.de/entgeltrechner/entgelt_en.html	Published
(C2) Probability of interruption	http://www.wingas-transport.de/45.html?&L=1	Published
(C3) Daily commercial firm and interruptible capacity	http://wtkg.de/entgeltrechner/entgelt_en.html	Published
(F1) Daily flow/aggregated information		October 2009

(F3) Daily aggregate day ahead nominations		October 2009
(F4) Historic gas flow database	http://www.wingas-transport.de/107.html?&L=1 On the “grid information” drop down tab at the top of the page select “history data”	Published

TSO: E.ON Gastransport		
Data Type	Link	Date to be published
(C1) Max technical capacity	http://www.eon-gastransport.com/cps/rde/xchg/SID-3F57EEF5-B59D5038/eon-gastransport/hs.xsl/3025.htm	Published
(C2) Probability of interruption	http://www.eon-gastransport.com/cps/rde/xchg/SID-3F57EEF5-B59D5038/eon-gastransport/hs.xsl/2461.htm	Published
(C3) Daily commercial firm and interruptible capacity	http://www.eon-gastransport.com/cps/rde/xchg/SID-3F57EEF5-B59D5038/eon-gastransport/hs.xsl/3025.htm	Published
(F1) Daily flow/aggregated information	http://transparency.eon-gastransport.com/Reports/TransparencyReport.aspx?Kultur=en-GB	Published
(F3) Daily aggregate day ahead nominations	http://transparency.eon-gastransport.com/Reports/TransparencyReport.aspx?Kultur=en-GB	Published
(F4) Historic gas flow database	http://transparency.eon-gastransport.com/Reports/TransparencyReport.aspx?Kultur=en-GB	Published

TSO: Svenska Kraftnät		
Data Type	Link	Date to be published
(C1) Max technical capacity		n.a
(C2) Probability of interruption		n.a
(C3) Daily commercial firm and interruptible capacity		n.a
(F1) Daily flow/aggregated information		n.a
(F3) Daily aggregate day ahead nominations	www.svk.se/Planerad-handel	Published
(F4) Historic gas flow		n.a

database		

TSO: Swedegas		
Data Type	Link	Date to be published
(C1) Max technical capacity	http://www.swedegas.se/?page=258	Published
(C2) Probability of interruption	The probability of being interrupted is reflected in the Energinet.dk tariff. This means that the price reflects the general risk: http://www.energinet.dk/en/menu/Market/Tariffs+and+prices/Gas+-+Transmission+tariffs/Gas+-+Interruptible+tariffs/Interruptible+tariffs.htm How much interruptible capacity there has been booked, and the gas flow per day from the previous month are also published, giving the shippers a good idea of the chance of interruption. See also: https://selvbetjening.energinet.dk/en/menu/PublicData/HistoricalFutureCapacity/HistoricalFutureCapacity.htm and: http://www.energinet.dk/en/menu/Market/Gas+market/Gas+market+reports/Gas+market+report.htm	n.a.
(C3) Daily commercial firm and interruptible capacity	http://www.swedegas.se/?page=258	Published
(F1) Daily flow/aggregated information	http://www.swedegas.se/?page=258	Published
(F3) Daily aggregate day ahead nominations		n.a
(F4) Historic gas flow database	http://www.swedegas.se/?page=258	Published

TSO: BBL Company		
Data Type	Link	Date to be published
(C1) Max technical capacity	http://www.bblcompany.com/en/download/Overview_of_available_firm_forward_capacity0908.pdf	Published
(C2) Probability	http://www.bblcompany.com/en/Plannedmaintenance.html	Published

of interruption		
(C3) Daily commercial firm and interruptible capacity	http://www.bblcompany.com/en/download/Overview_of_available_firm_forward_capacity0908.pdf http://www.bblcompany.com/en/download/Overview_of_sold_IFF_capacity_1008.pdf	Published
(F1) Daily flow/aggregated information	http://info.bblcompany.com	Published
(F3) Daily aggregate day ahead nominations	Requires IT changes and a new IT release The allocated energy (including energy balance) is provided to shippers for the points where they are active. Non-fiscal data (user specific): https://otis.gastransportservices.nl/nimbus-im/ Fiscal data (user specific): https://otis.gastransportservices.nl/dialog/	December 2009
(F4) Historic gas flow database	http://info.bblcompany.com	Published