Improved publication of information to promote transparency and competition in the European gas market

August 2006

Introduction

Market participants need to be able to predict the likely evolution of supply and demand affecting transportation flows, asset performances and prices. Without good information, a well-functioning wholesale market will be much slower to develop.

Improvements in information availability and transparency in the European gas market can be achieved without compromising commercial confidentiality or facilitating collusion. EU directives, regulations and Madrid guidelines require that certain information should have been published, transparent and harmonised1 from 1 July 2006.

Given the importance of proper information provision, this note updates EFET position on transparency from 2004 and sets out which information must urgently be published throughout Europe to improve market functioning and competition. EFET will continue to take part in the debate and to assist in developing appropriate guidelines for what further information should be made available.

The level of information provided by some TSOs is inadequate. This is illustrated by the draft benchmarking table on the information provided in some key transmission systems (see the Annex). Against this background EFET calls for urgent initiatives by regulators to ensure that EU Regulation 1775/2005 is properly implemented and that the required information is published immediately.

Several parts of the paper focus on the information requirements from Transmission Systems Operators (TSOs), mainly because gas trading takes place, or is developing, at the interfaces with gas transmission systems. But some of the information requirements may also apply to other areas where non-discriminatory third party access is required (e.g. storage or LNG terminals).

The paper is structured around the following areas:

- General information publication requirements
- Transmission capacity bookings information
- Information about gas flow allocations
- Balancing information
- Gas storage access and information
- Gas supply and demand information

1 Gas Directive 2003/55 Article 8.1.d, the Gas Regulation 1775/2005, the Guidelines for Good Practice as adopted by the Madrid Forum (GGP2), the Guidelines for Good Practice for Storage Operators (GGPSSO) and market information e.g. regarding price transparency.
Price and trading information; and

Gas quality information.

**General information publication requirements**

Timely access to information without undue delays is a vital service to market participants and information should be published in an easily accessible format on a non-discriminatory basis. Where information can only be made available by hub operators or TSOs, this should be provided as a service that is ordinarily required for access to the system.

EFET expects that as a general requirement, the published information is:

- accessible to all market participants on a non-discriminatory basis and at no additional cost. Information should be communicated at the same time, using the same means and in the same format to all market participants.

- easily accessible from the internet in a raw data format that can be downloaded and analysed independently by market participants. Information should, for example, not only be published in the form of graphs.

- published and accessible in both the respective national language and English, to facilitate use by non-national market participants.

- as detailed as possible, without compromising commercially sensitive information about individual market participants.

- available in real time, or as close to real time as possible.

- harmonised across Europe. TSOs should cooperate to ensure that publication takes place using the same units and timeframes. While it is most important that information is available and harmonised, ultimately EFET thinks that the publication should occur on one coordinated website instead of on individual TSO websites. EFET has previously suggested that the Gas Infrastructure Europe (GIE) website might be most appropriate.

- covering historic data where such data exist.

- validated and audited by regulatory authorities.

The remainder of this paper sets out the specific information requirements and recommendations for the various parts of the market in which EFET members operate.

**Transmission capacity bookings information**

EFET recommends that the following information should be provided to market participants:

- Improved information relating to on the level of firmness of capacity being offered. This information needs to include historical flows and a statement
from the TSO about the expected percent of days being interrupted. Such information enables shippers to assess the likelihood of interruption and hence the potential risk and value of the capacity, but is currently published by few TSOs.

- **Information affecting the available capacity (e.g. maintenance schedules) into the future**\(^2\). Outages should be notified immediately and should include, where possible, the expected duration and rationale for the outage.

- **Information on aggregated day ahead and within day nominations** on both national and cross borders systems.\(^3\)

- **TSOs should make capacity information available as near to real time as possible, but in any event on a day-ahead basis as a minimum initial step**\(^4\). If the balancing regime requires/enables adjustments within day, corresponding within day information is also required.

- **An internet-based system that allows market participants to book or bid for capacity and buy/nominate any unused or unsold capacity**\(^5\). Many TSOs offer online capacity booking and nomination systems, but lack systems to buy/nominate unused or unsold capacity.

The information about a future capacity/gas auctions needs to be communicated well ahead of time and clear rules need to be published regarding the process to be followed.

Whilst improving their own market information systems, TSOs should bear in mind the need for consistency between information provided for cross border and internal flows and capacities. Cooperation between TSOs will also help move towards consistent capacity booking information systems across Europe.

**Information about gas flow allocations**

Allocation issues are not adequately addressed in the Gas Transmission Regulation and could lead to new interoperability barriers unless action is taken now.

Aggregate flow information at all major input points (this includes import flows as well as production information) must be provided in aggregate form by TSOs promptly and must be integrated with the requirements of the network and balancing arrangements. This information is vital for shippers to be able to take action to correct any imbalance in sufficient time.

After the end of the balancing period, final allocation information should be provided promptly before a date agreed with users. After this date, allocations may not be amended further.

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\(^{2}\) This is also a requirement of the annex of the Regulation, under point 1(9), requiring regularly updated information about maintenance and flow disruptions.

\(^{3}\) Article 3.3 (3) of the annex of the Regulation requires TSOs to publish daily updates of day/week-ahead services based on nominations, contractual commitments and regular long-term forecasts on an annual basis for up to 10 years on all relevant points.

\(^{4}\) Id.

\(^{5}\) See Sections 1(4) and (5) of the annex to the Regulation requiring TSOs to implement standardised (re-)nomination procedures and online booking systems
Effective Operational Balancing Agreements (OBAs) and Interconnection Agreements (IAs) between TSOs are required to achieve this level of coordination, and are particularly important at cross-border locations. Effective OBAs will also have the benefit of reducing the routine technical information required by shippers from the TSO (except when the OBA limit is exceeded).

To ensure interoperability EFET considers that it may be prudent to publish the OBAs so that the limits affecting users and procedures are well known to market participants. In relation to the IAs, provided that the TSOs or upstream operators confirm that they have agreed consistent matching processes to ensure interoperability, and that Title Transfer is effective and robust to constraints, publication of the agreements themselves would be unnecessary. Instead, the relevant terms relating to gas flow allocations could be made available.

**Balancing information**

Network users need qualitative information as close to real-time as possible in order to be able to forecast their out-of-balance costs and as validation that the TSO is incurring costs efficiently. Information publication requirements include:

- **the calculation of imbalance charges**, which is usually provided through the transportation and balancing agreements between shippers and TSOs.

- **the costs incurred by the balancing provider in balancing the system**, such as volumes and prices bought and sold for the purpose of balancing and reason why an action was taken. Publication should take place as soon as possible after the event.

- **aggregate linepack forecasts** for timeframes appropriate to the adopted balancing regime.

- **capacity trades** (where relevant to the hub and where not separately shown by the TSO).

- **TSO scheduled flows for the shipper**, so that the shipper can take action if required to correct their imbalance.

**Gas storage access and information**

The Gas Directive requires storage operators to provide users (and by implication potential users) with the information needed for efficient access to storage facilities\(^6\). Additionally, the Guidelines for Good Practice for System Storage Operators (GGPSSO) provide comprehensive guidance on which information should be published in which format. Implementation of these non-binding guidelines is incomplete and needs to be improved, as the ERGEG’s interim monitoring report from May 2006 shows.

EFET stresses that information must be provided on a non-discriminatory basis. Any information available to one storage user (including the storage operator’s affiliated supply or trading businesses) should simultaneously be made available to all users (although this does of course exclude information relating to individual user accounts, which must be kept confidential).

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The rights and processes for all TSOs and Storage Operators also need improved transparency - e.g. it may make sense to abolish the TSO pre-emptive rights over bookings and operations.

EFET requests that storage system operators make, among other requirements, the following information available to market participants:

- the amount of available and sold storage
- aggregate levels of gas in storage
- current daily aggregated in- and outflow plus historic utilisation rates
- information on any reduction in storage capacity (maintenance, unplanned outages)
- the commercial conditions and charges for the offered services

As the nature of storage facilities throughout Europe vary considerably, the optimum aggregation of information may also vary. Nevertheless, storage operators should aim to publish this information in as much detail as possible.

**Gas supply and demand information**

Information on gas supply availability and forecast gas demand has a direct effect on the market’s perception of gas prices, and understanding of the formation of those prices. This includes information from offshore operations, storage, cross border trading and so forth.

Each TSO has forecasts of expected load (gas demand) and EFET considers that these must be made available to market participants, as it is done in the UK. EFET also expects that information is published on

- Upstream flows, at least in aggregate form at all system import points.
- Gas demand and forecasts in at least aggregate form for each balancing zone from the TSO’s network and for the system as a whole (where this is applicable).
- Information that may materially affect gas supply and demand availability at entry and exit points in aggregate form, including information on unplanned outages
- Actual and historic line pack data

Specific provisions may also need to be made for the disclosure of information leading to the potential declaration of a gas supply emergency, particularly where transportation services or trading may be suspended. This should take place within defined emergency procedures. Similarly, there may also need to be some information disclosure during an emergency and for the reinstatement of market services. Precise requirements have not been considered in this paper.
**Price and trading information**

Price transparency is one of the key features of a competitive market. Publication of prices gives buyers and sellers the confidence that they are transacting at market levels. Transparency of forward and futures prices provides signals for better investment and consumption decisions, and for management of risk.

One key issue for price transparency is that information is scattered among many participants (TSO, exchanges, participants themselves) and that incumbents may benefit from better information than the market. Co-ordination to ensure all these teams work together to enable the release of aggregate and comparable information is vital.

Apart from prices, other information is also necessary. For example, information on the depth of the market, responsiveness to events, and openness to manipulation, particularly for immature markets. EFET recommends that the following base data should be made available:

- **The number of registered and active counterparties** including (if counterparts agree) their identity and contact details. Probably the hub operator (which may be the TSO) or the Exchange is best placed to make this information available.

- **The number and volumes of trades by period.** This can also be used to compare the sizes of trades at different hubs, and whether they are growing or declining.

- **Surveyed prices of executed trades, and quoted prices for forward gas** (both bid and offer prices) should continue to be published, as is currently done by trade publications.

- **The traded volumes and corresponding churn factor and concentration of trading at a hub** (e.g. the Herfindahl-Hirschman Index, HHI).

**Gas quality information**

Gas appliances and processes in EU are designed and built to run within defined ranges of gas quality and composition. In order to ensure that gas is delivered to meet this requirement, TSOs impose obligations on parties importing gas onto the network to ensure that the commingled stream can stay within the defined ranges. Once the gas is in the network, all operational aspects of gas quality and the provision of any gas quality information affecting shippers or traders must be the responsibility of the TSO. The Madrid Forum has requested that the industry ensures that gas quality is not used as barrier to gas trading between member states.

Under certain circumstances, it is possible for TSOs to accept gas that does not meet the stated quality requirements depending on the precise differences of the specification of gas being imported, and the capability of the TSO to process or blend the gas such that the commingled stream remains within the required parameters. EFET requests additional information in this area to ensure further transparency that
give confidence that (1) gas quality parameters genuinely reflect the safety requirements and are not unduly onerous and (2) where the TSO has discretion to accept gas that is out of spec, this discretion is not being applied in an unduly discriminatory way.

Published information should include:

- **Gas quality parameters**, in particular where the EASEE-Gas specification has not been applied, together with a justification of the difference.

- **A statement of how the TSO will exercise discretion in its ability to accept off-spec gas**.

- **Actual measured values of key parameters** on an ongoing basis.

There must also be publicly available operational procedures for how a TSO will deal with off-spec gas entering the system, including any restrictions in its capacity to be able to deal with this gas.

**Conclusion**
EFET thinks that the level of information provided by some TSOs needs to significantly improve. We call for urgent initiatives by regulators to ensure that the Gas Regulation is properly implemented and that the required information is published as a matter of urgency. The lack of consistency in cross border information indicates a need for stronger regulatory control over operational aspects of international pipelines.

This note recommends the key information that should be published throughout the European gas market as a matter of urgency in order to improve market functioning and competition. In particular, information requirements are set out for capacity bookings, gas flow allocations, balancing, storage access, supply and demand, and price information. Ensuring transparency and availability of information provides gas market participants with confidence and will contribute to more efficient and competitive markets.

EFET welcomes further debate with key stakeholders on improved transparency requirements and its practical implementation.
# Annex: Draft Benchmarking results for gas TSO information provision

## 1. General information publication requirements to be published by TSO

<table>
<thead>
<tr>
<th>Requirement</th>
<th>UK</th>
<th>NL</th>
<th>BE</th>
<th>FR</th>
<th>DE</th>
<th>IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 non-discriminatory access at no additional cost</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>1.2 access from internet in raw data format</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes, some</td>
<td>Yes, some</td>
</tr>
<tr>
<td>1.3 published in national language and English</td>
<td>N.A.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes, some</td>
</tr>
<tr>
<td>1.4 as detailed as possible</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>1.5 available in real-time (or as close as possible)</td>
<td>Yes</td>
<td>Some</td>
<td>Some</td>
<td>Some</td>
<td>Some</td>
<td>Some</td>
</tr>
<tr>
<td>1.6 covering historic data</td>
<td>Yes</td>
<td>Some</td>
<td>Some</td>
<td>Some</td>
<td>Some</td>
<td>Almost none</td>
</tr>
</tbody>
</table>

## 2. Transmission capacity bookings information to be published by TSO

<table>
<thead>
<tr>
<th>Requirement</th>
<th>UK</th>
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<th>BE</th>
<th>FR</th>
<th>DE</th>
<th>IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 level of firmness of offered capacity (historical flows)</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2.2 maintenance schedules and outages</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>2.3 aggregated day ahead and within day nominations</td>
<td>No</td>
<td>Only day ahead</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2.4 capacity information available real-time</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2.5 web-based booking and nomination system</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

## 3. Gas flow allocation information to be published by TSO/ offshore operator

<table>
<thead>
<tr>
<th>Requirement</th>
<th>UK</th>
<th>NL</th>
<th>BE</th>
<th>FR</th>
<th>DE</th>
<th>IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Prompt allocation information by TSOs / offshore operators</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes, monthly</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>3.2 Publication of OBA’s and IA’s provisions on gas flow allocations</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
### 4. Balancing information
**to be published by TSO**

<table>
<thead>
<tr>
<th>4.1 calculation of imbalance charges</th>
<th>Yes</th>
<th>Yes</th>
<th>Yes</th>
<th>Yes</th>
<th>Yes</th>
<th>Yes</th>
<th>Yes</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2 costs incurred by balancing provider for balancing</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>4.3 aggregate linepack forecasts</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>4.4 capacity trades (where hub relevant)</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

### 5. Gas supply and demand information
**to be published by TSO**

| 5.1 aggregate upstream flows | Yes | No  | No  | Yes | No  | No  | No  | No  |
| 5.2 aggregate demand/forecasts for each balancing zone | Yes | No  | No  | Yes | No  | No  | No  | No  |
| 5.3 basis for declaration of supply emergency | Yes | No  | No  | Yes | No  | No  | No  | No  |
| 5.4 procedures for declaration of supply emergency | Yes | No  | No  | No  | No  | No  | No  | No  |
| 5.5 historical linepack data | Yes | No  | No  | No  | No  | No  | No  | No  |

### 6. Gas quality information
**to be published by TSO**

<table>
<thead>
<tr>
<th>6.1 full specification of gas quality parameters and justification</th>
<th>On request</th>
<th>On request</th>
<th>On request</th>
<th>On request</th>
<th>On request</th>
<th>On request</th>
<th>On request</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.2 Procedures for off-spec gas</td>
<td>Yes, in shippers agreements</td>
<td>Yes, in shippers agreements</td>
<td>Yes, in shippers agreements</td>
<td>Yes, in shippers agreements</td>
<td>Yes, in shippers agreements</td>
<td>Yes, in shippers agreements</td>
<td>Yes, in shippers agreements</td>
</tr>
<tr>
<td>6.3 actual measured values of key parameters</td>
<td>No</td>
<td>Only for shippers’ actual flow points</td>
<td>Only for shippers’ actual flow points</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes, but only historical values</td>
</tr>
</tbody>
</table>
Comments

General

a) For several entry and cross-border points, information is not published claiming confidentiality reasons (i.e. 3 or less shippers are active at this point). This reduces the overall value of the information provided and poses a great obstacle for the development of competition. Therefore it should be considered to review the use of this confidentiality clause.

b) There are great differences between the information publicly available on the website of TSOs and the information available to the shippers. We think that there should be no discrimination between shippers and other market participants.

* c) In Belgium, the domestic transmission network is operated by Fluxys, while one of the two major transit pipelines (Finpipe which is connected to Zeebrugge hub) is operated by Distrigas. Distrigas has no information available on its website, so we chose Fluxys for our comparison

General information requirements

1.1 TSOs should not charge for providing information which should be made publicly available in the first place
1.2 Data should be available in raw format, not only in graphs. Most TSOs provide raw format data, though some only to a limited extent
1.3 Data should be available in both English and the national language. This is the case for most TSOs, although Eon GT and Snam Rete Gas do not have translations for all data
1.4 Data should be as detailed as possible. Of course this is a subjective assessment, taking National Grid in the UK as a good practice example
1.5 and 1.6 Information should be available as close to real-time as possible and also cover historic data, apart from the UK, all other TSOs provide only incomplete data

Transmission capacity booking requirements

2.1 Historical data about the percentage of interruptions, i.e. the firmness of capacity, is useful for the shippers' market analysis (e.g. to estimate how much capacity was available in the past)
2.2 Maintenance schedules and outages enable market participants to estimate the risk of interruption and value the capacity

2.3 Aggregated information about the day-ahead and within day nominations

2.4 Capacity information real-time: TSOs should provide regular updates on how much capacity is available, preferably synchronised with the timing of the balancing arrangements.

2.5 Web-based booking and nomination systems: All TSOs have introduced web-based booking systems by now.

**Gas flow allocation information**

3.1 Allocation information should be provided promptly by TSOs/offshore operators so that it is integrated with the balancing arrangements and allows shippers to take corrective actions.

3.2 Elements of the OBAs and the IAs which concern the gas flow allocation should be published so that interoperability is ensured.

**Balancing information**

4.1 Shippers must be able to calculate imbalance charges beforehand. Calculation methods are published in the balancing agreements signed between TSO and shipper.

4.2 The balancing provider should make his costs of balancing transparent, e.g. by publishing the volumes purchased and sold for the purpose of balancing.

4.3 Aggregate linepack forecasts can be used by shippers to estimate the system's capacity (i.e. if the system will be long or short).

4.4 TSOs should inform the market when trading capacity at hubs.

**Gas supply and demand information**

5.1 Information on aggregate upstream flows should be provided so that market participants can estimate the amount of gas in the system.

5.2 Aggregate information on gas demand and demand forecasts should be published for each balancing zone as well as for the systems as a whole. This is naturally not applicable to the Dutch H-gas network, which serves only as a transit network and has no demand.
5.3 and 5.4 It should be made transparent which is the basis for declaring a supply emergency and which procedures follow in the event of a supply emergency so that market participants can act accordingly.

5.5 Historical linepack data is useful for the shippers’ market analysis.

Gas quality information

6.1 Full specification of gas quality parameters should be made available on the TSO websites and justifications should be given by the TSO if gas specs differ from the EASEE gas specification. Detailed gas quality information is only provided on request by the TSOs.

6.2 Procedures how TSO will deal with off-spec gas need to be made transparent. The balancing/shippers agreements concluded between the shipper and the TSO specify the procedure for the treatment of off-spec gas. Usually, the TSO reserves the right to refuse in part or total the delivery of off-spec gas, with different impact. This information should be available to all market participants, not only shippers.

6.3 Actual measured values of key parameters on ongoing basis should be published so shippers are aware of the quality of the gas actually flowing at the entry and exit points. Snam Rete Gas makes this information for different stations of the network publicly available, however it is only historical data (the last 12 months, published 10 days after the end of the respective month). GTS and Fluxys limit their information to shippers and the points at which these are actually flowing gas.