



EREG Guidelines of Good Practice for Gas Balancing (GGPGB)

**E06-GFG-17-04
6 December 2006**

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Scope and objective

The Gas Regulation¹ (which came into force on 1 July 2006), sets out conditions for access to natural gas transmission networks and includes Articles in relation to gas balancing and imbalance charges. These specify high level requirements for gas balancing regimes including for example the need to ensure that rules are fair and non-discriminatory.

The purpose of the EREG Guidelines of Good Practice for Gas Balancing (GGPGB) is to provide more detailed guidance to both Transmission System Operators (TSOs) and the relevant National Regulatory Authority (NRA) on the design of gas balancing mechanisms. This is to help ensure that the mechanisms maintain the safe, secure, efficient and reliable operation of the network and that the rules are based on objective criteria and designed and applied in a fair, non-discriminatory and transparent manner. The GGPGB is applicable from its publication date (15th December 2006) and compliance is fully requested by 1 April 2007.

These GGPGB, approved by EREG on the 6th December 2006, represents the advice of the European Regulators' Group for Energy and Gas (EREG)² to the European Commission (EC) on its interpretation of Article 7 of the Gas Regulation³.

The GGPGB is not legally binding and no requirement can be made under the GGPGB that contravenes national or European legislation. They are designed to be consistent with and support the existing requirements in the Gas Regulation.

In the event that any party believes that there is a conflict between the requirements of the GGPGB and any national or European legislation that will materially effect either its interests or its ability to comply with the GGPGB, it will without any unreasonable delay notify the relevant national regulatory authority, specifying in detail the exact nature and extent of the conflict. This notification will be made public unless the relevant regulatory authority is satisfied, on the basis of objective justification provided to it, that to do so would unacceptably infringe on commercial confidentiality.

The GGPGB apply to the relevant national regulatory authority and/or the authority to which the Member State has delegated the responsibility for designing and/or operating the balancing mechanism. The GGPGB also apply to TSOs and network users. Where Member States have established one or more entities or bodies set up in compliance with Directive 2003/55/EC for the purpose of carrying out one or more functions typically attributed to a TSO with regard to balancing the GGPGB shall likewise apply to these entities or bodies⁴.

¹ 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.

² Commission Decision of 11 November 2003 on establishing the EREG.

³ 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.

⁴ Article 1.2 of the Gas Regulation (EC) No 1775/2005.

Subject to compatibility with national requirements, all bodies to which these guidelines apply shall be in compliance by 1 April 2007 unless another date is specified. Where implementation by 1 April 2007 is not achievable the TSO will make public the fact and notify the relevant national regulatory authority and will pursue implementation at the earliest possible date, but in any event not later than 1 July 2007.

1. Required characteristics of a balancing regime

- 1.1 As provided for Article 25.2.b of the Directive 2003/55/EC of the 26 June 2003, “the regulatory authorities shall be responsible for fixing or approving prior to their entry into force, at least the methodologies used to calculate or establish the terms and conditions for (...) the provision of balancing services”.
- 1.2 Balancing rules shall be designed and applied in a fair, non-discriminatory and transparent manner and shall be based on objective market based criteria. Balancing rules shall reflect genuine system and market needs taking into account the resources available to the TSO and to network users.
- 1.3 The development of balancing rules and any subsequent changes should be subject to appropriate consultation (unless the balancing rules are already specified in national legislation where this requirement would not be relevant) with market participants and decisions should be supported by objective criteria and analysis.
- 1.4 Where balancing rules (including rules relating to imbalance charges) are implemented by the TSO they should be equally applied to its own commercial operations and related undertakings, where part of a vertically integrated company, as to third parties.
- 1.5 The balancing rules should be designed to minimise the residual physical balancing role of the TSO subject to the safe and economic operation of the network and other relevant requirements specified in section 3 hereunder.

- Balancing period

- 1.6 The balancing system should generally be based on balancing periods characterised by a settlement procedure at the end of the balancing period. The choice of an appropriate balancing period needs to be based on an objective assessment against a number of criteria and decisions should be published with supporting information. These criteria should include:
 - The operational capabilities of the transportation system to balance the system;
 - The flexibility and balancing tools that are elaborated by the TSO and offered to market participants;
 - Avoiding the creation of any barriers to entry - particularly for new (and smaller) market entrants;
 - Whether consumers’ (daily) offtake profile has, on average, a broadly recurrent pattern;
 - The interaction of the balancing period with effective commercial incentives to balance, in particular interactions of shorter balancing periods in electricity markets with potentially longer periods in gas;

- The interaction with balancing periods in connected gas systems to ensure that no barriers to cross border trade and flows of gas between connected gas transportation systems are created;
 - Availability and accuracy of the information over the relevant period that is made available to network users concerning their imbalance position allowing them to take timely corrective balancing actions;
 - The costs imposed on TSOs and network users by particular balancing regimes, for example the IT costs of providing more regular information flows over shorter balancing periods and the transaction costs incurred by network users from potentially taking more frequent balancing actions; and
 - Nomination and re-nomination procedures complementary to the balancing period.
- 1.7 Where a balancing period is used, daily is preferred (unless a different period is specified in national law) and unless there are technical/operational reasons that mean that a different balancing period is necessary to ensure that the system can be balanced and/or for safety and security reasons.
- 1.8 As an alternative, it is also possible to use a system where there is no **pre-defined** balancing period. As long as the cumulated imbalance of a network user is kept within specified tolerance levels there is no need for a settlement procedure and therefore balancing period.
- 1.9 It is important that network users are not exposed to undue risks that they cannot manage effectively and/or without incurring inefficient costs that could create barriers to entry to the market. Therefore market participants should have access to appropriate information, adequate re-nomination procedures and flexibility tools/services so that they can manage their imbalance positions (and therefore risk) efficiently, taking into account the relevant characteristics of the balancing system, in particular the balancing period and/or the width of the tolerance margins.
- **Imbalance charges**
- 1.10 The tariffs for tolerance services or imbalance charges include all charges due by the network user in the cases where his imbalance remains within the specified tolerance levels. Imbalance charges shall be cost reflective to the extent possible, whilst providing appropriate incentives on network users to balance their input and offtake of gas.
- 1.11 They shall be fair and non-discriminatory and based on objective criteria. They shall avoid cross-subsidisation between network users and shall not hamper the entry of new market entrants.
- 1.12 Any calculation methodology for imbalance charges as well as final tariffs shall be made public by either the relevant authority or the TSO as appropriate.
- 1.13 There should also be accurate targeting of appropriate balancing and operation costs to those participants that caused them to be incurred. Any costs that cannot be targeted should be allocated back to all network users in a non-discriminatory manner.
- 1.14 Where information flows are a problem TSOs shall use provisional allocations in the calculation of imbalance charges to reduce the risk for network users.

- 1.15 Provisional allocations will be settled as soon as possible and the time period for settlement should be approved where appropriate by the relevant regulatory authority after proper consultation with the TSO and network users should there be any subsequent changes. After the expiry of the settlement period for final allocations no penalty charges should be charged by the TSO.

- **Penalty Charges**

- 1.16 Penalty charges may be imposed on network users (by the TSOs or via a code or agreement) whose imbalance between input and offtake from the transmission system exceeds the specified tolerance levels, subject to these charges being in accordance with the terms of 1.1.
- 1.17 Penalty charges which exceed the actual balancing costs incurred, insofar as such costs correspond to those of an efficient and structurally comparable network operator and are transparent, shall be taken into account when calculating tariffs in a way that does not reduce the TSOs interest in balancing and does not create barriers to entry. Penalty charges shall be approved by the relevant national regulatory authority.

- **Trading and pooling of imbalance positions**

- 1.18 In the absence of a well functioning/liquid within day market, allowing market participants to manage their imbalance positions efficiently, the TSO should have or should allow systems to be put in place to facilitate the pooling and trading of imbalance positions. The period of time allowed for pooling and trading of imbalance positions needs to be consistent with that allowed for provisional allocations made by the TSO. The provision of such systems should not in anyway undermine the primary responsibility of network users to efficiently manage their inputs and offtakes over the relevant period (according to the rules and incentives of the respective balancing regime) and/or the safe, secure and economic operation of the network.

- **Tolerance Levels and Tolerance Services**

- 1.19 Where provided, tolerance levels and services should be designed in a way that reflects the actual technical capabilities of the transmission system and, where appropriate, adjacent transmission systems.
- 1.20 In the case of non-market based balancing systems, tolerance levels shall be designed in a way that either reflects seasonality or results in a tolerance level higher than that resulting from seasonality, and that reflects the actual technical capabilities of the transmission system. Tolerance levels shall reflect genuine system and market needs taking into account the resources available to the TSO and the network user.
- 1.21 In respect of tolerance services particular account should be taken of the extent to which tolerances may be utilised by network users to offer "balancing gas" or cause balancing costs to be incurred by the TSO that are subsequently socialised.

- **Market information and transparency of balancing arrangements**

- 1.22 Each TSO should implement user-friendly systems to make available directly to network users or to the public on the internet, as a minimum, the information relating to the areas specified in Annex 2 of the GGPGB in a timely manner in national language and in English. The level of information published shall be set out by each TSO, based on the balancing regime in place and approved by the relevant national regulatory authority in consultation with network users. Information shall be disclosed in a meaningful, quantitatively clear and easily accessible way and on a non-discriminatory basis taking into account Article 6 and Article 9.1 c) of the Gas Regulation⁵.
- 1.23 Each TSO shall also make available confidentially to each user its balancing status and other information relating to the areas specified in Annex 2 of the GGPGB.
- 1.24 Non-confidential information must be provided promptly and on the same time scale to all users on non-discriminatory bases. Network users may request the TSO not to publish information about the aggregate use of balancing services if such publication would harm the commercial interest of the user(s). In cases of non-publication, the relevant national regulatory authority will, when requested by relevant parties, review the decision not to publish. In doing so, it will balance the commercial sensitivity of information against the public interest for transparency. If it considers that the reasons for non-publication are not proportionate, are unfair, or discriminatory, the relevant national regulatory authority can require that the TSO publishes the information. In any respect, information should always be published by the TSO when three or more users participate in the balancing mechanism in the relevant period. The TSO shall notify the relevant national regulatory authority, without any unreasonable delay, where it has not published specific data (e.g. for reasons of costs, to avoid any potential market abuse or to avoid significant harm to their commercial interests). The relevant national regulatory authority can require further details from the TSO, including substantiated reasons, for non-publication. If the reasons for non-publication are not proportionate, are unfair, or discriminatory, the relevant national regulatory authority can require that the TSO publishes the information.
- 1.25 In addition where they exist, charges for the provision of such information shall be approved by the relevant national regulatory authority and made public by the TSO.

- **Balancing costs and incentives for the TSO**

- 1.26 In relation to balancing costs TSOs should be cost reflective and have the correct incentives to ensure that the costs of taking residual balancing actions are efficiently incurred. The residual balancing actions of the TSO should be minimised subject to the safe, secure and economic operation of the network.

⁵ 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.

- 1.27 Where a TSO's balancing regime permits the acceptance of bids and offers for the purposes of residual balancing gas as a means to balance the system it should procure flexibility (including gas) in a transparent and non-discriminatory manner using market based mechanisms (where possible).
- 1.28 Where a TSO is not permitted to accept bids and offers for balancing gas as a means to balance the system the TSO should procure the gas in other ways according to transparent non-discriminatory procedures including for example accessing gas from storage or through contracts with network users.
- 1.29 TSOs' balancing costs shall be efficiently incurred and should be charged back to network users on a non-discriminatory basis.
- 1.30 Information regarding the costs incurred by the TSO for this purpose shall be made publicly available. If the TSO is concerned that doing so would have a negative impact on the commercial position of market participants or itself, it should notify the relevant national regulatory authority. The relevant national regulatory authority will then decide whether the information should be published or not.

- **Harmonisation of balancing rules**

- 1.31 National regulatory authorities and TSOs shall endeavour to harmonise (and at least make compatible) balancing regimes and streamline structures and levels of balancing charges in order to facilitate trade between Member States and in particular with regards to:
 - a. tolerances;
 - b. imbalance charges; and
 - c. balancing periods.
- 1.32 Where balancing regimes remain different between interconnected networks, a report shall be produced to identify the key areas of difference and their impact, including on trade and the efficient operation of the market. In addition, where appropriate, an action plan shall be produced between the TSOs to identify the development of measures to ensure greater harmonisation (and compatibility) of balancing regimes and their structures.
- 1.33 These reports should include in particular:
 - the way in which the balancing regimes interact;
 - identify key differences and the reasons why they exist;
 - the impact of any differences on trade and the incentives provided to network users and TSOs;
 - how differences in arrangements for dealing with safety and security will impact on trade, incentives and costs; and
 - areas for harmonisation and a timetable for making changes.
- 1.34 To ensure transparency these reports shall be published following open consultation with all market participants and approved by the NRA.

2. Role and Responsibilities of 'relevant national regulatory authority'

- 2.1 Each relevant national regulatory authority should ensure that the gas balancing regimes are based on the criteria set out in these GGPGB and the Gas Regulation, whether they are directly responsible for the design, fixing or approving of the methodologies used to calculate or establish the terms for the provision of balancing services or for approving proposals developed by the TSO and/or other market participants.

3. Role and Responsibilities of TSOs

- 3.1 Where the TSO has the responsibility to design the gas balancing regime it should ensure that it does in accordance with the requirements in these GGPGB and the Gas Regulation.
- 3.2 Each TSO retains the overall responsibility for the economic and efficient operation of its system and therefore should retain a residual role to maintain physical balance to ensure the safe, secure, efficient and reliable operation of its system, subject to the incentives, information and flexibility and tools provided to shippers to balance their individual portfolio.
- 3.3 When technically and/or economically necessary for providing efficient access to the system, in particular when the balancing regime is characterised by tight tolerance margins or a short balancing period, the TSO should offer cost-reflective flexibility services (based on the available linepack – if appropriate) in a way which reflects the actual technical capabilities of the transmission system and facilitates competition.
- 3.4 TSOs shall provide sufficient, well-timed and reliable on-line based information on the balancing status of network users as indicated in 1.21 to 1.24 and Annex 2 of the GGPGB.
- 3.5 In the case where any network user is subject to special terms and conditions (particularly where a TSO is part of a vertically integrated company and the user is an affiliated company), these terms and conditions should be made available to the relevant national regulatory authority and the TSO should explain the reasons for these terms and conditions. This requirement in no way limits any rights that the relevant national regulatory authority may have under national or EU law.

4. Role and Responsibility of network users

- 4.1 It shall be the primary responsibility of network users to balance their own inputs and offtakes over the relevant period according to the rules and incentives of the respective balancing regime.
- 4.2 The network users shall:
- a. not operate in a manner that restricts, distorts or prevents competition;
 - b. provide all data required by the TSO to enable it to carry out its duties as residual balancer as specified in either the relevant network code or national regulation; and
 - c. put relevant IT in place in order to be able to communicate with TSOs via agreed interfaces and standards.

5. Confidentiality requirements

- 5.1 TSOs should take steps to ensure appropriate arrangements are in place to protect the confidentiality of information, at least including that:
- a. Commercially sensitive information from network users' accounts remain confidential including from any related undertakings.
 - b. No information available to the TSO concerning the operation of the balancing mechanism shall be passed to other parts of the company in advance of being provided to all market participants; staff working for any affiliate business must have no access to information which could be commercially advantageous, such as details on actual or potential network users, where such information is not made available to all market participants. The arrangements to implement this requirement should include a code of conduct for staff and a compliance programme, supervised by a Compliance Officer.
 - c. In any case the relevant national regulatory authority shall be provided full access to information on request in line with national legislation.

6. Changes to these guidelines

- 6.1 These guidelines can be reviewed periodically by ERGEG and any changes will be consulted upon. Following consultation, revised guidelines for implementation by stakeholders and relevant authorities will be published and posted on the ERGEG website.

Annex 1 – Definitions

1. 'Transmission' means the transport of natural gas through a network, which mainly contains high pressure pipelines, other than an upstream pipeline network and other than the part of the high pressure pipelines primarily used in the context of local distribution of natural gas, with a view to its delivery to customers, but not including supply.
2. 'Balancing period' means the period within which the offtake of an amount of natural gas, expressed in units of energy, must be offset by every network user by means of the injection of the same amount of natural gas into the transmission network in accordance with the transportation contract or the network code.
3. 'Network user' means a customer or potential customer of a transmission system operator, and transmission system operators themselves in so far as it is necessary for them to carry out their functions in relation to transmission.
4. "National regulatory authority" means the competent body designated by Member States with the function of regulatory authority within that Member State as provided for in Directive 2003/55/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in natural gas.
5. "Member state" means the countries that belong to the EU.
6. "Tolerance level" means the level of imbalance, within or at the end of the balancing period, under which there is no penalty, either because such tolerance is integrated in the capacity offer, or because the tolerance has been offered and charged separately as a balancing and/or flexibility and/or tolerance service.

Annex 2 – Market information and transparency of balancing arrangements

This annex provides a guide to National Regulatory Authorities (NRAs) and TSOs regarding the information that should be made available to individual network users and to the market more generally. The areas identified in this annex should be seen as a minimum requirement – and it is crucial that all relevant information that is necessary for the efficient and effective operation of the balancing mechanism is made available to users and the market to an appropriate level of detail and frequency.

Information for individual network users

The minimum information that TSOs should make available to network users to enable them to manage their imbalance positions is listed below. Each TSO (following agreement by its relevant national regulatory authority) will provide a list to network users of the information that it will make available (including the level and frequency).

- Network user specific input and output scheduling calculations and charges.
- Network user specific energy imbalance and related charges .
- Network user specific Penalty charges.
- Forecast demands.
- Actual demands.
- Actual and forecast weather information appropriate to the balancing regime.

Information for the market

The minimum information that TSOs should make available to the market is listed below. Each TSO (following agreement by its relevant national regulatory authority) will publish the list of information that it will make available (including the level and frequency).

- Forecast demand.
- Actual demand.
- Shrinkage factors + quantities.
- Pricing information.
- Standard Contract information.
- Aggregate network user imbalance charges.
- Planned and unplanned interruptions.