



## Framework Guidelines on Gas Balancing

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*The upstream gas industry supports a cost reflective, efficient, market based balancing mechanism which incentivises flexibility, provides operational transparency, and encourages a competitive safely functioning network.*

### Background and Summary

The Commission invited European energy regulators ERGEG to draft a framework guideline on balancing in gas transmission networks. As announced in the 17th Madrid Forum ERGEG will present its draft framework guideline on balancing at the 18th Madrid Forum. The gas balancing framework guideline will form the foundation for the subsequent development of a network code outlining the rules for system balancing. As outlined in Article 8 of Regulation (EC) No 715/2009, one of the tasks of ENTSOG is to develop network codes in order to promote the functioning of internal markets and cross border trade and to ensure optimal management, coordinated operation and sound technical evolution of the natural gas transmission network.

The OGP supports a market based balancing mechanism that is harmonised across the EU and which is transparent, non discriminatory and cost reflective, whilst providing maximum flexibility to network users. To demonstrate this support, this paper has been prepared as input to the ERGEG development process.

The paper lays out several principles for the development of a balancing system, which OGP believes will lead to a cost reflective, efficient market based balancing mechanism that incentivises maximum flexibility, provides operational transparency, and encourages a competitive safely functioning network.

The following topics are addressed in more detail in the body of the text:

- a. Balancing Period
- b. Imbalance Charges (Tariffs or charges in cases where imbalance position remains within the specified tolerance levels)
- c. Penalty Charges (where an imbalance position exceeds the specified tolerance levels)
- d. Trading and pooling of imbalance positions
- e. Tolerance Levels and Tolerance Services
- f. Market Information and transparency of balancing arrangements

- g. Balancing costs and incentives for the TSO
- h. Harmonisation of balancing rules
- i. Role and responsibilities of the relevant NRA
- j. Role and responsibilities of the TSOs
- k. Role and responsibilities of network Users
- l. Confidentiality requirements
- m. Transitional Arrangements

## a. Balancing Period

- Daily balancing regime
- The TSO should be obliged to submit technical/operational or safety/security reasons to the NRA where a different balancing period is considered necessary, in addition to consultation with stakeholders

A daily balancing regime affords networks users sufficient time and flexibility to balance their position and optimise their portfolio, thus facilitating liquidity within the market

Shorter balancing periods would unduly penalise small shippers and new entrants, owing to a lack of sufficient flexibility in their portfolio to respond

The majority of Member States already operate a daily (or longer) balancing regime<sup>1</sup>, therefore, implementing shorter balancing periods as standard, for example hourly, would create significant issues the larger part of the European market including:

- Substantial contract renegotiations, i.e. terms associated with nominations, allocations and prices
- Additional metering to enable TSOs and market participants to accurately measure gas flows and calculate allocations on an hourly basis
- Major overhaul of IT systems, owing to the increase in data input, storage and processing requirements
- The associated complexity is likely to involve a substantial number of stakeholders, which would delay harmonisation of balancing regimes and, therefore, competition and liquidity in the European market

## b. Imbalance charges

Balancing charges

- must be explicitly addressed within the framework Guidelines for Gas Balancing as they are an integral part of the balancing regime
- Shall be reflective of market-based prices
- Shall be fair and non discriminatory and avoid cross-subsidisation between network users and not impede new market entrants
- Shall be based on actual inputs to and offtakes from the system and be reflective of actual costs incurred
- Should accurately allocate the appropriate balancing and operational costs to those participants that caused them to be incurred
- Payable by or to the TSO so that it remains cost neutral with respect to balancing charges and penalties, mitigating the risk of potential market abuse
  - The daily imbalance charge should be based on actual inputs to and offtakes from the system
  - Where the daily imbalance is positive, the TSO should pay to the User the System Marginal Sell Price for the day

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<sup>1</sup> The majority of Member States are shown to have daily or longer, balancing regimes in the Kema report, p.43: 'Study on Methodologies for Gas Transmission Network Tariffs and Gas Balancing Fees in Europe' Tender No.: TREN/C2/240-241-2008: <file:///F:\Gas%20Balancing%20-%20Kema%20study.pdf>

- Where the daily imbalance is negative, the User should pay to the TSO the System Marginal Buy Price for the Gas Day
- Where for any day, the TSO has not effected any market balancing actions, the System Average Price (SAP) for that day should be the average for each of the preceding 7 days
- A tolerance may be applied

System Marginal Buy Price – the highest price paid by the TSO in relation to a balancing action for that day

System Marginal Sell Price – the lowest price offered to the TSO, in relation to a balancing action for that day

System Average Price - the average price of gas traded on the market for that day

### **c. Penalty Charges**

- Scheduling charges
  - The User shall be incentivised to match the quantities delivered to and offtaken from the system with the quantities nominated for such delivery and offtake
  - Scheduling charges should be chargeable on the basis of the difference in quantity between the amount nominated and the amount actually delivered / offtaken multiplied by x% of the SAP for that day
  - A tolerance should be applied

### **d. Trading and pooling of imbalance positions**

- In the absence of a well functioning/liquid within day market, allowing Users to manage their imbalance positions efficiently, the TSO may allow systems to be put in place to facilitate the pooling and trading of imbalance positions
- The pool should nominate a registered network user, which will be responsible for all relevant imbalance charges and subject to the same credit requirements etc
- This regime should be monitored by the NRA at regular intervals, to assess whether it remains appropriate, as the national market develops
- As liquidity/market based mechanisms are established the systems around pooling and trading should be closed.

### **e. Tolerance Levels and Tolerance Services**

- Tolerance levels should reflect the actual technical capabilities of the transmission system and, where appropriate, adjacent transmission systems
- Tolerances should also reflect the genuine capabilities of network users to balance their position, considering the liquidity and flexibility of the relevant system and the flexibility tools available to users
- Efficient capacity allocation and congestion management procedures will ensure shippers have access to capacity to purchase flexibility tools and to optimise their portfolio day ahead and within day

- TSO to use energy exchange to buy or sell gas, to ensure non-discriminatory and transparent access for all network users

#### **f. Market Information and transparency of balancing arrangements**

- TSOs should implement user-friendly systems and make them available directly to Users or to the public on the internet, as a minimum
- The OGP concurs with ERGEG's GGPGGB, Annex 2 for the information to be made available<sup>2</sup>
- The TSO should publish a report at regular intervals, to demonstrate that efficient balancing actions have been taken, in accordance with the network code
- The TSO should publish the range of balancing tools available to it and the circumstances in which it will most likely utilise those tools
- TSOs should ensure network users are given actual information on their balancing status, and the overall system balancing status, in a timely manner
- Linepack and predicted closing linepack information should also be made available within day

#### **g. Balancing costs and incentives for the TSO**

- The TSO, in its role as residual system balancer, should be incentivised to take all reasonable steps to balance the system in a cost-reflective, efficient manner
- The residual balancing actions of the TSO should be minimised subject to the safe, secure and economic operation of the system
- The TSO should procure balancing services in a transparent and non-discriminatory manner, using market based mechanisms
- Where the availability of linepack is insufficient to enable the TSO to residually balance the system and to ensure the most economic and efficient outcome, the TSO should have a suite of balancing tools available, ranging from day ahead to year ahead with which to balance the system in the most economic and efficient manner, these might include the following:
  - Use of linepack
  - Balancing forwards, futures or options contracts with market players
  - Supply / demand side management

#### **h. Harmonisation of balancing rules**

- NRAs 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 regard to:
  - Tolerances
  - Imbalance charges
  - Balancing periods
  - Calculation of linepack
  - Time, frequency and format of information provision

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<sup>2</sup> [http://www.energy-regulators.eu/portal/page/portal/EER\\_HOME/EER\\_PUBLICATIONS/CEER\\_ERGEG\\_PAPERS/Guidelines%20of%20Good%20Practice/Gas/E06-PC-11-12\\_E06-GFG-17-04\\_GGPGGB\\_2006-12-06.pdf](http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_PUBLICATIONS/CEER_ERGEG_PAPERS/Guidelines%20of%20Good%20Practice/Gas/E06-PC-11-12_E06-GFG-17-04_GGPGGB_2006-12-06.pdf)

## **i. Role and responsibilities of the relevant NRA**

Regulators should have the following responsibilities with respect to system balancing:

- Regulators shall ensure that the TSO acts in a non-discriminatory and cost reflective manner
- Harmonise and align balancing regimes
- Regulators should improve cooperation in order to implement aligned balancing regimes in the regions/Europe;

## **j. Role and responsibilities of the TSOs**

- The TSO's primary responsibility is to residually balance the system, within the operational parameters, in a safe, reliable, and efficient manner
- The TSO should ensure network users are provided with non-discriminatory and cost reflective access to flexibility services (predominantly linepack) to aid network users to balance their position to the extent technically possible, within the capabilities of the transmission system
- Provide all relevant information in a definitive manner to network users to enable them to keep their portfolio balanced, including:
  - Results of efficient capacity allocation and congestion management procedures
  - Use of energy exchange to buy or sell gas, to ensure non-discriminatory and transparent access for all network users

The above should only apply to flexibility services which are owned/operated by the TSO and should not be interpreted such that the TSO should force market parties to make their (commercially developed and owned) flexibility assets available to other market participants at cost.

As the residual balancer, it is not the responsibility of the TSO to invest in flexibility services (i.e. gas storage etc). Such investments should be made by market parties and offered on commercial terms.

Further responsibilities of the TSO are:

- To ensure that the administrative burden of ICT systems required to interface with the TSO are kept to the minimum possible
- Establish a credit policy reflective of the actual imbalance risks faced by the TSO. Any financial securities required from market parties should reflect the actual credit risk
- Ensure that appropriate measures are taken avoid a gas emergency. If necessary, the TSO should contract emergency capacity (flexible supply or demand interruption), in advance, with market parties
- Facilitate upward and downward gas quality conversion
- Facilitate interconnection of markets
- Improve cooperation in order to implement aligned balancing regimes in the regions/Europe

### **k. Role and responsibilities of network users**

Network users should have the following responsibilities with respect to system balancing:

- Network users shall be incentivised, through market mechanisms, to balance their inputs and withdrawals from the system
- Network users should operate according to the rules of the network and in a manner that does not distort the market
- Provide the required information to the TSO in a timely manner to allow the TSO to carry out its physical balancing duties
- The facility to perform secondary trading of imbalance positions
- A market based facility to offer capacity to the TSO to assist in balancing the system

### **l. Confidentiality requirements**

TSOs should take steps to ensure appropriate arrangements are in place to protect the confidentiality of information, at least including that:

- commercially sensitive information from network users' accounts remain confidential including from any related undertakings.
- 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.

### **m. Transitional Arrangements**

- A maximum timeline for the transitional phase should be set at [5] years after implementation of the network code in the relevant member state
- Where, for technical/operational or safety/security reasons and, subject to consultation, transitional arrangements are required, they should be established on a transparent basis and annexed to, rather than embedded within, the network codes
- Tolerances for some of the charges might be widened (with set timeline), to give all market participants the opportunity to get accustomed to the new arrangements
- Imbalances within predefined tolerances could be cashed-out at SAP, rather than the SMP, to manage difficulties in the transition period
- Tenders for system energy balancing may be appropriate, during the development of a more liquid trading market
- In the absence of a well functioning/liquid within day market, the TSO may draw reference prices from correlated liquid trading hubs, as per the German market
- Strict monitoring of the TSO by the NRA, in particular where affiliated shippers play a special role in balancing the system must be put in place to ensure non-discrimination

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**About OGP.** The International Association of Oil and Gas Producers (OGP) represents the interests of companies engaged in the exploration and extraction of oil and natural gas, as well as national and other related industry associations. OGP membership spans the globe and accounts for more than half of the world's oil output and about one third of global gas production. From our London office, we foster cooperation in the area of health, safety and the environment, operations and engineering, and represent the industry before international organisations, such as the UN, IMO and the World Bank, as well as regional seas conventions, such as OSPAR, where we have observer status. OGP Europe in Brussels represents before the EU OGP members who are active in Europe.