

Balancing Program



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DISCLAIMER

This catalogue (the “balancing program”) describes certain information regarding the applicable balancing regime within the BeLux area. Please note that the balancing program can be amended from time to time. In any case, Balansys hereby disclaims any and all responsibility for any changes to the content of the balancing program which lies outside of its control. Such changes may be the result of *inter alia* financial and regulatory constraints defined by the relevant authorities.

In addition, the information in this balancing program should not be construed as giving rise to any contractual relationship whatsoever between Balansys (or any of its affiliated entities) and any interested party.

1 INTRODUCTION

In addition to the BeLux Integrated Market Model, this document (the Balancing Program) describes the balancing services offered by Balansys within the BeLux area in accordance with the balancing agreement (contractual terms and conditions) and the balancing code (access rules and procedures). These documents are to be developed by Balansys, and approved by both national regulatory authorities of the Grand Duchy of Luxembourg and of Belgium; the ILR and the CREG respectively. These documents and the regulated tariffs in force regarding the balancing within the BeLux area can be found on the Balansys website <http://www.balansys.eu/>.

As described in the BeLux Integrated Market Model, Network user shall sign the balancing agreement in order to:

- subscribe to the balancing services offered by Balansys and,
- be allowed to use the other services offered by the TSOs of the BeLux area (except if specified otherwise)

The balancing services consist notably in:

- The calculation and the communication to each Network user of their individual balancing position ($GBP_{h,z,g}$) and of the market balancing position ($MBP_{h,z}$) based on information received from both TSOs of the BeLux Area as further detailed in section 2.1
- Monitoring of the market balancing position as described in 2.2,
- The execution of the required balancing settlements, within the gas day and at the end of the gas day as described in section 2.3,
- Communication of data related to the balancing activities as described in section 2.4,
- Provision of data on the Electronic Data Platform as described in section 3,
- The invoicing resulting from such balancing services as described in section 4.

This Balancing program is intended for information purposes only.

2 BALANCING REGIME WITHIN THE BELUX AREA

2.1 GENERAL PRINCIPLES OF MARKET-BASED BALANCING

Market-based balancing has two objectives:

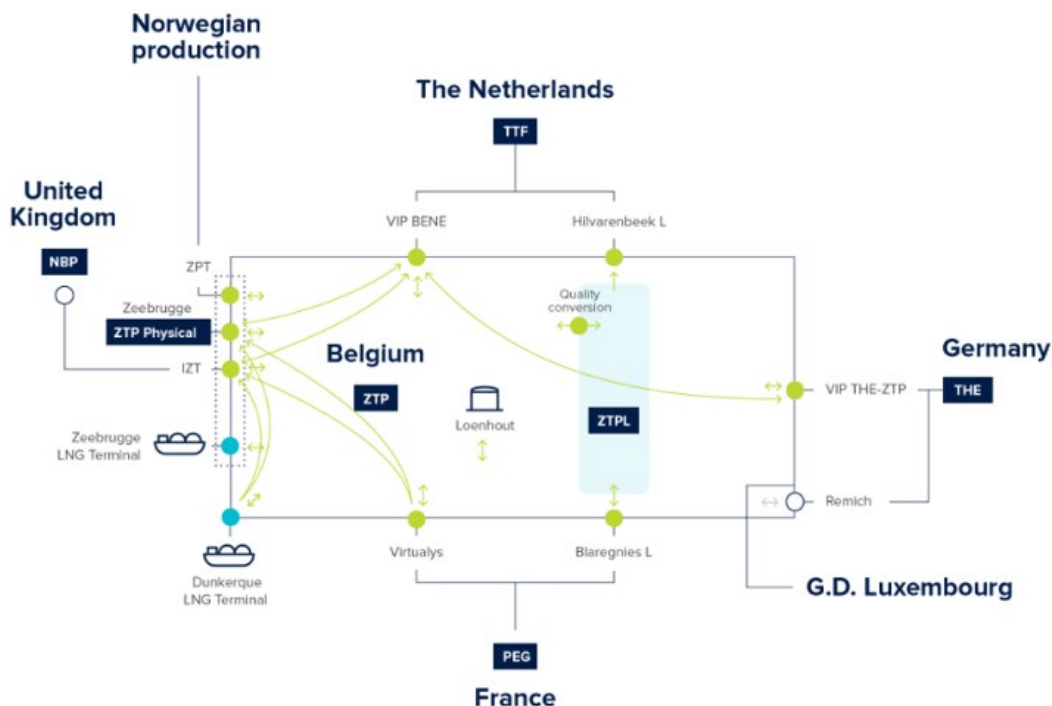
- Make network users responsible, on a cumulative basis for all hours of a given gas day, for balancing within the BeLux area by properly adjusting inputs with regards to offtake, and limit Balansys intervention to cases where the market exceeds predefined thresholds.
- Enable market cost reflectivity of residual Balansys actions by directly relating the cost of such actions to the actual commodity market prices at the moment of such actions and focusing those costs on responsible parties.

This is achieved by Balansys thanks to a settlement of the positions when residual actions are necessary and a financial compensation based on the actual Balansys Buy or Sell price for such action on the wholesale market.

Conform to the Balancing Network Code, balancing shall be neutral i.e. the Balancing Operator shall not gain or lose money via its balancing activities. When applicable, the Balancing Operator will invoice the Neutrality Charge in accordance with Regulated Tariffs.

2.2 MARKET-BASED BALANCING RULES

In order to reliably and efficiently operate the BeLux area, network users are requested to balance inputs and outputs of natural gas over the period of one gas day, in accordance with the hourly data supplied electronically by Balansys in accordance with 2.5.

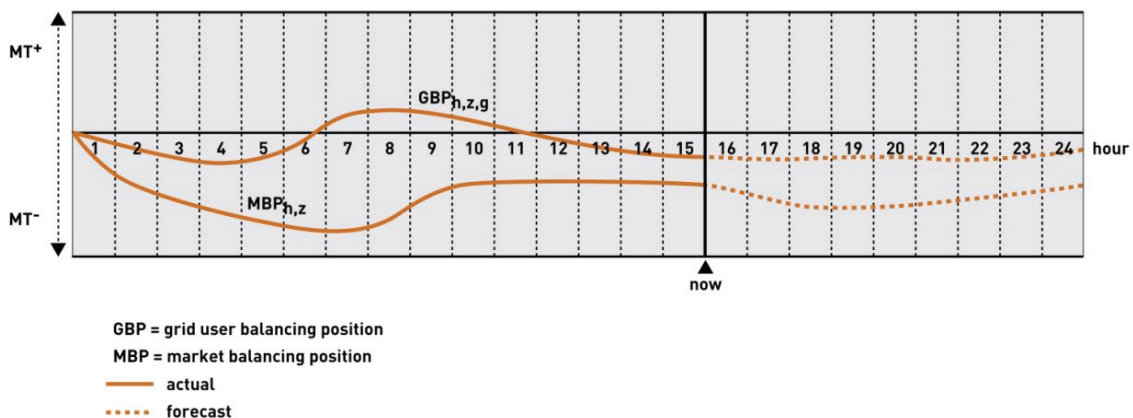


Balansys calculates, in both H and L zones, the individual network user balancing position of each network user active in the concerned zone and the market balancing position based on provisional information sent by both TSOs of the BeLux area. The following information is communicated to Balansys on hourly basis:

- In the H-zone:
 - o Creos Luxembourg communicates, for each network user active in its transmission grid, the sum of the entry and exit allocations in Luxembourg (interconnection point and end customers) for all preceding hours for the given gas day and an indicative forecast of those quantities for the remaining hours of the gas day.
 - o Fluxys Belgium communicates, for each network user active in its high-calorific transmission grid, the sum of the entry and exit allocations on the Belgian H-gas grid (interconnection points, ZTP and end customers) for all preceding hours for the given gas day and an indicative forecast of those quantities for the remaining hours of the gas day.
- In the L-zone:
 - o Fluxys Belgium communicates, for each network user active in its low-calorific transmission grid, the sum of the entry and exit allocations on the Belgian L-gas grid (interconnection points, ZTP-L and end customers) for all preceding hours for the given gas day and an indicative forecast of those quantities for the remaining hours of the gas day.

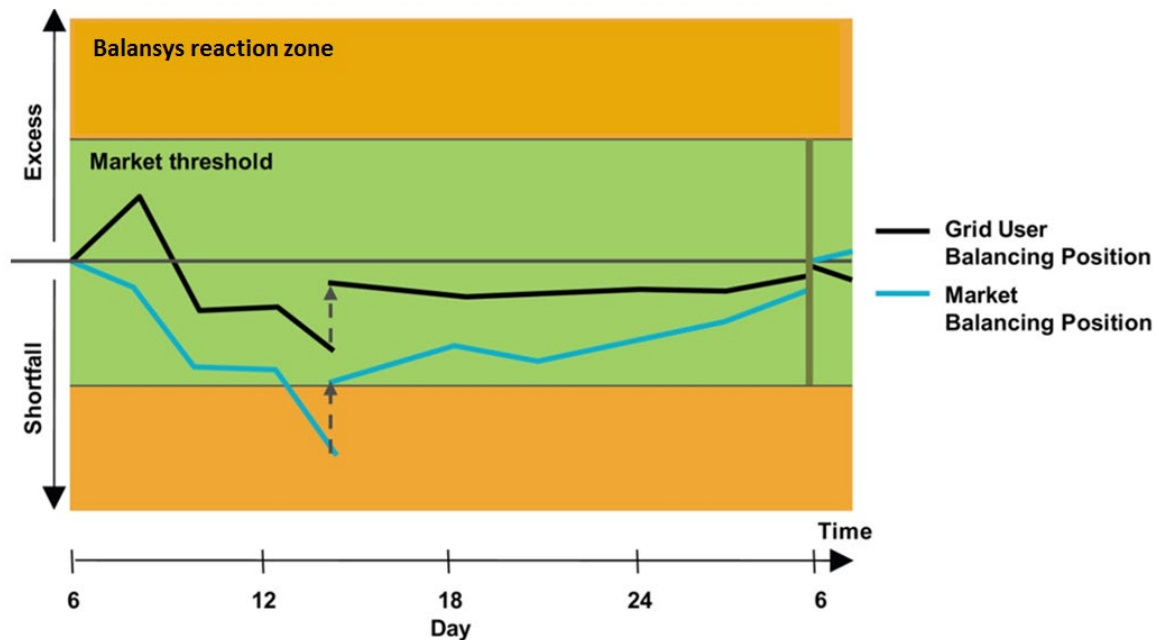
Taking these information into account, Balansys calculates:

- The network user balancing position ($GBP_{h,z,g}$) which shows, for a given network user (g), for a given hour (h) and for a given zone (z), the delta between the sum of all provisional entry allocations and the sum of all provisional exit allocations in the BeLux area for all preceding hours and an indicative forecast of those positions for the remaining hours of the gas day, also taking into account the net confirmed title transfers confirmed by Fluxys Belgium for the relevant notional trading services (ZTP or ZTPL) and the hourly transferred imbalance(s) for the considered zone under the imbalance pooling service in accordance with 2.4.
- The market balancing position ($MBP_{h,z}$) which shows the delta between the sum of all provisional inputs and the sum of all provisional outputs in the BeLux area for all preceding hours and an indicative forecast of those positions for the remaining hours of the gas day for all network users in a given zone. The market balancing position is therefore equal to the sum of all network user individual balancing positions for the zone in question.



During the gas day, as long as the market balancing position remains within the predefined upper and lower market threshold, there is no intervention by Balansys. In case the market balancing position goes beyond the upper (or lower) market threshold, Balansys intervenes through a sale (or purchase) transaction on the commodity market (see section 2.3.3) for the quantity of the market excess (or shortfall) and settles in cash that quantity with the network user(s) contributing to such imbalance in proportion of their individual contribution.

The price of the transaction done by Balansys on the market as well as the gas price and eventual conversion costs are used for the determination of the price reference used for such within-day balancing settlement, hence reflecting the market value for that residual natural gas at that time.



At the end of each gas day, all the network user balancing positions and the market balancing position are settled to zero by a settlement in cash for each network user.

2.3 BALANCING SETTLEMENTS AND ALLOCATION SETTLEMENTS

2.3.1 Intra-day balancing settlements when reaching the threshold in the H-zone or the L-zone

If the market balancing position goes beyond the market threshold (MT^+ and MT^-), the market excess or market shortfall is instantly settled proportionally in respect of the network users causing the said market excess or market shortfall via their network user balancing position.

Such a settlement is executed in the following 5 steps:

1. Identification of the quantity to be settled: market shortfall [market excess];
2. Identification of network users causing imbalance (all network users having at that time an individual balancing position contributing to the market shortfall [market excess]) and their proportional contribution to the market imbalance;

3. Correction of causing network users balancing position proportional to their contribution to the market imbalance (Balansys delivers gas to the network user in case of shortfall and offtakes gas from the network user in case of excess);
4. Transaction initiation by Balansys for the purchase [sale] of a quantity of gas compensating for the market shortfall or the market excess (see section 2.3.3);
5. A financial settlement at a price calculated in accordance with the balancing code.

Steps 1 to 3 are instantly calculated and applied by Balansys when determining, on an hourly basis, the latest market and network user balancing positions. The individual corrections of the positions resulting from the balancing settlement by Balansys (residual action) are communicated to the network users together with their individual position and the market position. The financial settlement is handled during the invoicing cycle.

2.3.2 End-of-day balancing settlement for H-zone or L-zone

At the end of the gas day, each network user is settled to zero so that the network user starts the next gas day with a zero position. The end-of-day balancing settlement is done in the following 5 steps:

1. Identification of total quantity to be settled equal to the market balancing position of the last hour of the gas day: market shortfall [market excess];
2. Identification of the quantity to be settled per network user, being for each network user equal to their individual network user balancing position of the last hour of the gas day ;
3. Correction of network users' balancing position to zero (Balansys delivers gas to the network user in case of shortfall and offtakes gas from the grid user in case of excess);
4. Transaction initiation by Balansys for the purchase [sale] of a quantity of gas compensating for the market shortfall or the market excess (see section 2.3.3);
5. A financial settlement at a price calculated in accordance with the balancing code of Balansys.

Steps 1 to 3 are instantly calculated and applied by Balansys when determining, on an hourly basis, the latest market and grid user balancing positions. The individual corrections of the positions resulting from the settlement by Balansys (residual action) are communicated to the grid users together with their individual position and the market position. The financial settlement is handled during the invoicing cycle.

2.3.3 Residual balancing organisation 1

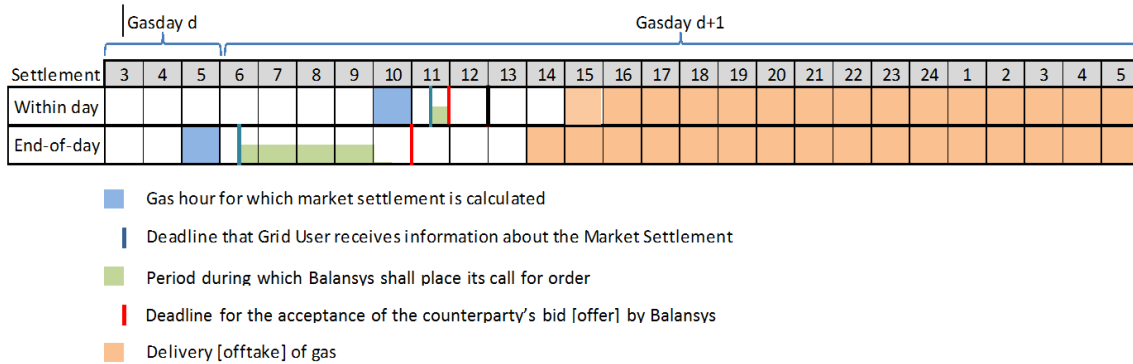
Balansys residual balancing is organised on the wholesale commodity market. When Balansys needs, during the gas day - be it within-day or end-of-day - to buy [or sell] gas to compensate a market shortfall [or excess], it will do so by accepting bids [offers] for a notional product with Balansys available on an exchange platform as mentioned on www.balansys.eu. Balansys will buy [or sell] the needed quantities of gas using the best available prices offered by market participants for the related products at such time according to the exchange platform matching rules. Once concluded, the transaction(s) will serve to determine the reference price used for the financial compensation of a given settlement action. Such price, together with the related settlement quantities will be published on the electronic data platform as soon as they are determined.

The products will therefore be available for trading on the exchange platform: one for H-zone and the other one for the L-zone. Both products imply a balance-of-day delivery of the gas to [from] Balansys. Offers [bids] can be placed at all times by network users registered on the exchange on those products.

¹ For the sake of clarity, balancing activities of Balansys limited to the commercial balancing compensating the difference between positive and negative quantities allocated to the grid users.² Such a notification can happen by posting message calling for bids and/or offers on the exchange.

When needed for its residual balancing activities, Balansys will use its best efforts to notify the market² of its intention to buy [or sell] a specific product as soon as possible but not later than 60 minutes after the gas hour for which the within-day market shortfall [or excess] has been detected, or not later than 270 minutes after the gas hour for which the end-of-day market shortfall [or excess] has been detected or when needed based on the forecasted Market Imbalance Position. Balansys shall use its reasonable endeavours to make such notification at least 30 minutes before the product expiry on the exchange for the end-of-day settlement.

Balansys will buy [or sell] gas per multiple of a standard lot size of 100 MWh³ and on a product with delivery to [redelivery from] Balansys starting 3 hours after product expiry.



Before product expiry, Balansys will seek to close the needed transaction(s) according to the price merit order of the offers [bids] available at that time, up to the needed quantity. The price reference for the cash compensation of the settlement with the network user, called the settlement price, will be determined as the minimum [maximum] of the gas price to which a small adjustment is applied⁴ and the minimum (maximum) price of those transaction(s) in case of a market excess [shortfall].

If, for any reason, balancing operator was unable to close the needed transaction(s) on the ZTP notional trading services for the compensation of L-zone settlements, balancing operator will post the corresponding notification(s) on the H-zone related product(s) and will seek to close the needed transaction as soon as possible on either the L-zone or the H-zone taking into account the conversion fee. The settlement price in such case, will be determined as the minimum [maximum] of the gas price and minimum [maximum] price of those transaction(s) in case of a market excess [shortfall], decreased [increased] with a conversion fee in accordance with the applicable regulated tariff for a daily Gas Quality Conversion Service L->H [peak load H->L], corresponding to the hourly peak capacity needed to convert the required quantity of gas.

2.3.4 Allocation settlement

Balancing settlement described in 2.3.1 and in 2.3.2 are based on aggregated provisional data received from the TSOs of the BeLux area.

In a second step, each TSO of the BeLux area will check and validate the metering data on its own transmission grid. The difference between provisional data sent to Balansys and the validated data will be

² Such a notification can happen by posting message calling for bids and/or offers on the exchange.

³ Multiple of standard lot size of 100 MWh divided by the remaining number of hours in the gasday rounded to the upper MW to be compliant with the Gas Market Instrument Specifications Zeebrugge Trading Point (ZTP) of an exchange platform as mentioned on www.balansys.eu⁴ Small adjustment for causers & helpers are fixed in the regulated tariffs for balancing and approved by ILR and CREG

⁴ Small adjustment for causers & helpers are fixed in the regulated tariffs for balancing and approved by ILR and CREG

settled by the concerned TSO with the concerned network user through an allocation settlement as described in the Contract Cadre Fournisseur and in the Standard Transmission Agreement applicable in Luxembourg and in Belgium respectively.

2.4 IMBALANCE POOLING SERVICE

The imbalance pooling service allows network users to pool their hourly Imbalance by transferring the hourly imbalance from one network user to another.

The pooling of the hourly imbalance implies a transfer of the hourly imbalance network users need to agree upon before the start of the imbalance pooling service by means of an imbalance pooling form. The imbalance pooling service is based on the designation of a role between two network users, where for one network user known as the imbalance transferor its hourly imbalance is automatically transferred to another grid user also known as the imbalance transferee, as detailed in the balancing code.

This transfer of the hourly imbalance of the network user balancing position will be performed by Balansys for which Balansys instructs Fluxys Belgium on behalf of the network user to perform a ZTP transfer for the amount of such hourly imbalance in order to transfer the hourly imbalance from the transferor to the transferee hence Fluxys Belgium will invoice the relevant network users for this transfer.

2.5 TRADING SERVICES

On the BeLux area market, network users may trade title of natural gas using ZTP trading services, ZTP notional trading services for the facilitation of the transfer of title of gas between network users within a zone (ZTP notional trading services for the H Zone and ZTPL notional trading services for the L Zone) and/or ZTP physical trading services for the facilitation of the transfer of title of gas at Zeebrugge either over the counter through bilateral agreements with third parties, either anonymously on an exchange platform (enabling anonymous trading of natural gas with clearing services).

Details on these services can be found in the Transmission Program of Fluxys Belgium.

2.6 NEUTRALITY CHARGE

In accordance with Article 29 (1) of Regulation 312/2014, the balancing activity must be financially neutral: *“The transmission system operator shall not gain or lose by the payment and receipt of daily imbalance charges, within day charges, balancing actions charges and other charges related to its balancing activities”*.

Based on CREG and ILR decisions relating to the calculation method of balancing charges for neutrality purposes (see CREG and ILR websites), the neutrality charge is invoiced / credited on the basis of provisional energy allocations at the level of domestic exit points, without distinction between the different types of consumers.

2.7 DATA COMMUNICATED TO NETWORK USER TOWARDS MARKET-BASED BALANCING REGIME

The network users receive hourly allocation messages (in Edig@s protocol and also published on the electronic data platform on <https://gasdata.balansys.eu> such as described in section 3) within 35 minutes after the hour, which includes information about:

- The network user balancing position
- The market balancing position
- The indicative forecast of the network user balancing position for the remaining hours of the day

- The indicative forecast of the market balancing position for the remaining hours of the day
- The market threshold
- The excess/shortfall settlements for the market and the network user

3 DATA TRANSMISSION ON THE ELECTRONIC DATA PLATFORM

Balansys publishes data regarding the balancing in the Belux area on its website (www.balansys.eu) where market parties can find a variety of useful information. Data for all relevant parameters are updated hourly or daily as the case may be and users can retrieve customised reports tailored specifically to their needs.

The following information (and more) is publically available on the electronic data platform of Balansys:

- Balancing: operational data for the market to monitor the balancing position

As part of the balancing agreement Balansys also provides personalised data services via the electronic data platform, yet only privately accessible to network users, that allows them to visualize, consult or download their own individualised operational data such as:

- individual and market position and their indicative forecast till end of the day as described in section 2.2;
- price information relating to residual balancing actions by Balansys; and
- all aggregated data required to check Balansys invoices.

For detailed allocation information, the gr'id user is referred to the respective TSO.

4 INVOICING

According to the terms and conditions set forth in the balancing agreement, invoices are usually issued monthly by Balansys to network users, on the 10th day of the month. Invoices will be rendered either electronically either by letter or fax. A copy of the invoices and all their related appendices will be made privately available on the electronic data platform of Balansys. Generally speaking, invoices are due within 30 days after receipt and failure to respect terms of payment may lead to the provision of financial security by the network user or the suspension of such balancing services.

As detailed in the balancing code, Balansys issues two invoices, the monthly BAL invoice and the monthly BAL self-billing invoice, with respect to the balancing monthly fee:

The monthly BAL invoice is sent on the 10th of a given month M and cover:

- The shortfall monthly balancing settlement fees for month M-1.
- The monthly neutrality fees (if applicable).

The monthly BAL self-billing invoice is sent on the 10th of a given month M and cover:

- The excess monthly balancing settlement fees for month M-1
- The monthly neutrality fees (if applicable).

A summary of the consolidated invoices by due date will be transferred to the network user for each month, including a summary note with the balance payable to the balancing operator or refund to the network user.

In certain cases (as defined in the section 2.11, 2.12 and 2.13 of the Balancing Agreement), Balansys has the right to proceed to an early invoicing and will issue an anticipative invoice to the network user. This anticipative invoice is due within 5 business days (as defined in the Balancing Agreement) and those above conditions do not prevail in this specific case.

5 HOW TO CONTACT US

Any request for additional information or questions in relation to the service offer should be addressed to:

Balansys

105 Rue de Strassen

L-2555 Luxembourg

E-mail: info@balansys.eu