

The balancing and ALIZES service

Under the terms of your transmission contract, you are subjected to a daily balancing obligation in TRF zone.

As a supplier to end customers, you have the possibility to subscribe to ALIZES service in order to ease handling your imbalances.

The balancing principles

GRTgaz's balancing system is governed by the following principles:

- There is a single balancing zone: the Trading Region France (TRF) on which the daily imbalance of each shipper is calculated.
- The entries on this balancing zone must be identical to the exits of this balancing zone. The difference is called imbalance.
- Shippers have a balancing obligation on a daily basis and should make every effort to keep their daily imbalance to zero
- In addition, shippers should contribute to the balancing of the system so that it remains within its operational limits and therefore avoids the need for intervention by the system operator that may expose system users to potentially substantial imbalance cash-out prices
- GRTgaz ensures the balancing of the system, in the event of shippers' default, by making gas purchases and sales on the market and, in the event of failure, by calling on the market via the locational product (See the fact sheets "GRTgaz's interventions on the Powernext Gas Spot exchange" and "Locational products - Reminder").
- The daily imbalance of a shipper on the TRF is spread over the GRTgaz and Teréga perimeters to settle the imbalances.
- A shipper's imbalance settlement price is calculated on the basis of the market price.
- The balancing system is financially neutral for GRTgaz

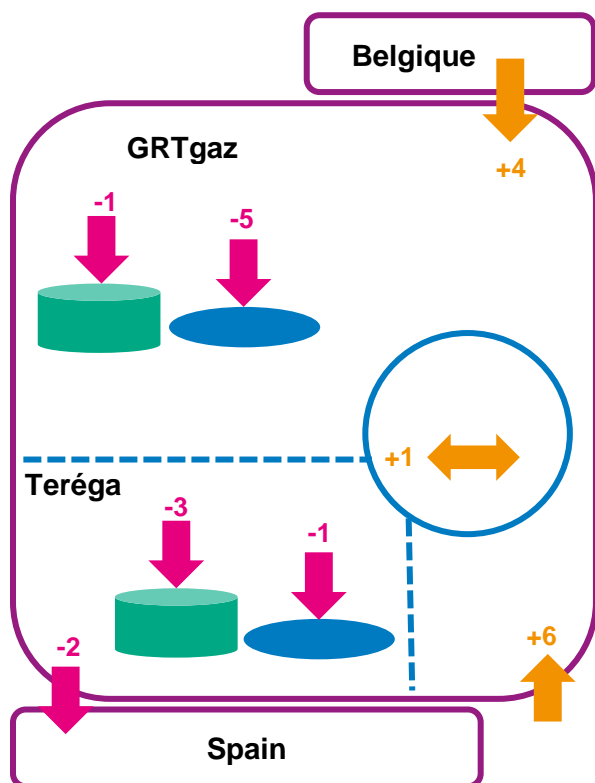
Daily Imbalances

The daily imbalance is calculated on the single balancing zone, the TRF.

The **TRF zone** includes all GRTgaz and Teréga's contractual points, including the Gas Exchange Point (PEG). The list of GRTgaz's contractual points can be found in the "contractual scheme of the system" sheet.

The difference between the daily quantities allocated on entry and the daily quantities allocated on exit constitutes the daily imbalance of the shipper.

The programming imbalance published on TRANS@ctions corresponds to the imbalance on the TRF zone but the contractual points specific to the Teréga network are not displayed.



Example: For a given shipper

Exit confirmations on Teréga & GRTgaz perimeters
 $-1-5-2-3-1 = -12$

Entry confirmations on Teréga & GRTgaz perimeters
 $+4+6+1 = +11$

Provisional TRF imbalance displayed by TSOs
 $\Delta = -1$

Distribution of imbalances on GRTgaz and Teréga perimeters: referred to as EBJ

The shipper's imbalance is then distributed between GRTgaz and Teréga perimeters, which results in a Daily Imbalance per TSO (EBJ).

The distribution key for the imbalance between GRTgaz and Teréga is calculated daily for each shipper, and depends on the category of that shipper in the following segmentation:

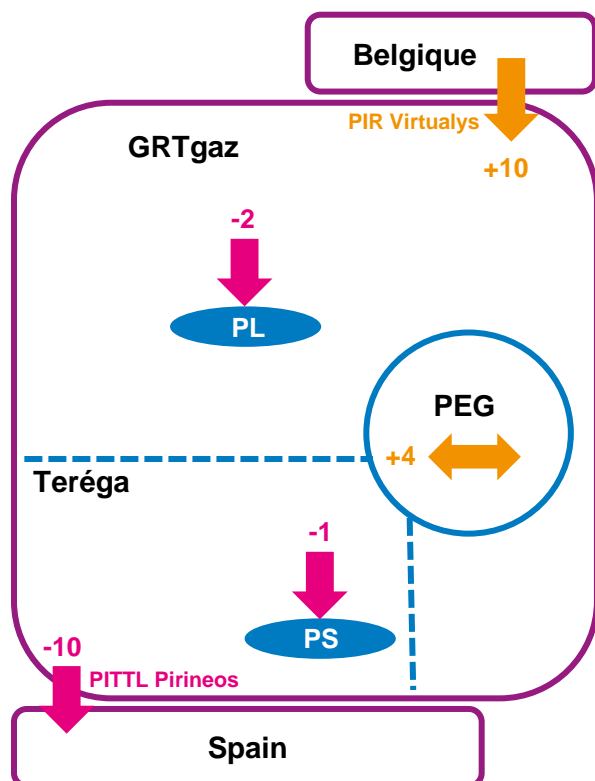
- **Supplier** (end customer supplier): customer who have non-zero allocated quantities of delivery on the TRF (at GRTgaz and/or Teréga)
- **Shipper** (importer/exporter): customers who hold non-zero allocated quantities on Entry/Exit points on the GRTgaz and/or Teréga network and don't have allocated delivery quantities
- **Trader**: customers who only have non-zero allocated quantities at the PEG gas exchange point.

This segmentation is dynamic and is reassessed everyday according to the allocated quantities of the gas day in question.

The distribution key

Depending on the category, imbalance distribution of TRF area between the 2 transport operators works as:

- **Supplier**: prorata of delivery allocations (PL or PS) on geographic perimeters
- **Shipper**: prorata of transit allocations (E/S) on geographic perimeters
- **Trader**: 100% of the imbalance allocated to GRTgaz



Example: For a « supplier », for the gasday D

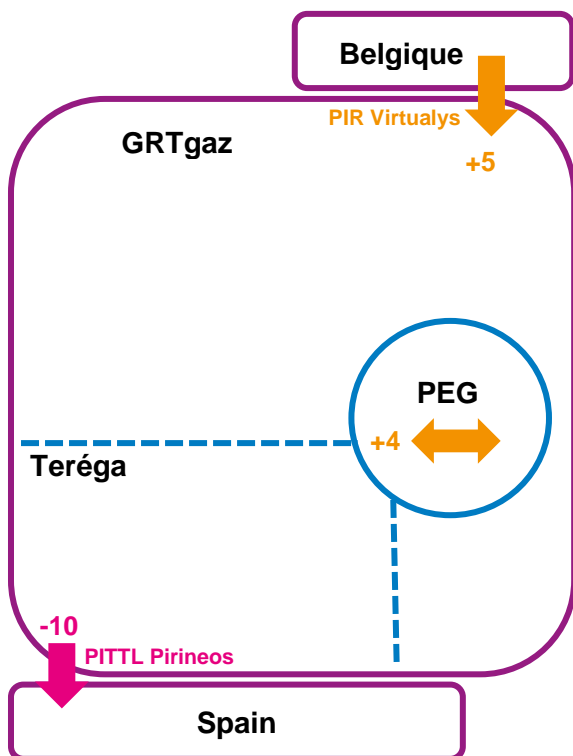
$$\text{Total Entry : } +10 + 4 = +14$$

$$\text{Total Exit : } -10 - 2 - 1 = -13$$

Imbalance TRF = +1

$$\begin{aligned} \text{EBJ Teréga} \\ \text{perimeter} \\ &= 1 \times [1/(1+2)] \\ &= 0,33 \text{ GWh} \end{aligned}$$

$$\begin{aligned} \text{EBJ GRTgaz} \\ \text{perimeter} \\ &= 1 \times [2/(1+2)] \\ &= 0,67 \text{ GWh} \end{aligned}$$



Example: For a « shipper », for the gasday D

Total Entry : $+5+4 = +9$

Total Exit : -10

Imbalance TRF = -1

EBJ Teréga perimeter
 $= -1 \times [10/(5+10)]$
 $= -0,67 \text{ GWh}$

EBJ GRTgaz perimeter
 $= -1 \times [5/(5+10)]$
 $= -0,33 \text{ GWh}$

Imbalance cash-out price for the GRTgaz perimeter.

For each gas day:

In the event that the shipper is short (negative imbalance), GRTgaz invoices him for its Daily Imbalance (EBJ) at the Marginal Purchase Price.

Conversely, if the shipper is long (positive imbalance), GRTgaz buys its Daily Imbalance (EBJ) from him at the Marginal Sale Price.

Weighted Average Price: this is calculated every day by Powernext based on the weighted average of within-day transactions on the PEG.

Marginal Sell Price: $\min(\text{Weighted Average PEG Price} - 2.5\% * |\text{Weighted Average PEG Price}|$; minimum of GRTgaz's and/or Teréga's selling intervention prices relating to the PEG or to the locational product).

Marginal Buying Price: $\max(\text{Weighted Average PEG Price} + 2.5\% * |\text{Weighted Average PEG Price}|$; maximum of GRTgaz's and/or Teréga's buying intervention prices relating to the PEG or to the locational product).

ALIZES' service

Shippers supplying end customers can subscribe to ALIZES' service which consists of a full exemption of the Marginal Price settlement for every eligibility day of the service.

Subscription modalities to ALIZES' service

ALIZES' service subscription only concerns GRTgaz's balancing perimeter. Thus, only GRTgaz's interventions are taken into account when determining the days eligible for the ALIZES service.

The service benefits to shippers whom at least a delivery capacity has been allocated, relating to a PITD or an industrial site directly connected with GRTgaz network on the balancing perimeter concerned for each subscription month. Delivery capacities effective allocation is noticed at the time of invoicing.

Before 20th of the month M-1, the shipper subscribes to the service for an undetermined period starting the month M. GRTgaz confirms its subscription to the shipper (within 5 working days after 20th of the month M-1).

The termination of the service is possible until 20th of M-1 to be effective the month M.

Application modalities to ALIZES' service

The service is based upon the end-of-day line pack planned as published on GRTgaz website.

ALIZES service applies each day when GRTgaz did not intervene, which means that GRTgaz did not need to engage balancing actions to maintain the system within its operational limits (nor buying/selling on the stock exchange, nor located products).

Otherwise, ALIZES' service is not eligible and the Marginal Price applies.

Monthly cash-out of residual imbalances

For eligible days of the month M a Residual Imbalance is established as the algebraic sum of imbalances relating to these days.

Shippers' residual imbalances are cleared based on the Neutral Reference Price (NRP) equals to the weighted average of the average prices of every eligible day to the service by the volumes of imbalance of the shipper, in absolute value, compensated with the service.

Financial neutrality

The balancing system is financially neutral for GRTgaz. The difference between sales and purchases made by GRTgaz for the purpose of balancing is reallocated or collected to shippers who deliver to end customers in proportion to their delivered quantities.

The account of neutrality balancing is published on Smart GRTgaz.

Summary

The imbalance is the difference between the entries and exits on the TRF zone.

This imbalance is distributed between GRTgaz and Teréga, according to their portfolio of end customers, to give a daily balance (EBJ) by perimeter.

Daily balance (EBJ) are bought/sold at the Marginal Price to each shipper:

For a short-in-gas shipper: sale by GRTgaz at the Marginal Purchase Price

For a long-in-gas shipper: purchase by GRTgaz at the Marginal Sale Price

Shippers recipient of the ALIZES service are exempted from the regulation at Marginal Price of their daily imbalances for every day in which the service has been eligible ; in this case, only residual imbalances of the month are cleared to a neutral price called Neutral Reference Price (NRP)

The balancing system is neutral for GRTgaz, which reverses or collects the difference from shippers.