

Network Code on Gas Balancing – NC BAL

Commission Regulation (EU) 312/2014

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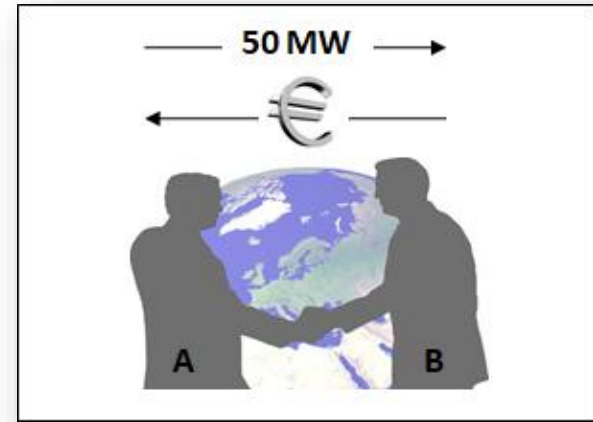


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Overview

Balancing: physical vs. commercial world



- Physical assets: pipes, network, compressor stations
- Ensuring system integrity and physical balance of the network

- Commercial: supply contracts, transit, wholesale trading
- Incentives for network users to operate in a balanced manner

Aim: to give network users sufficient portfolio flexibility while at the same time providing the TSO with tools to manage system balance

Network Code on Gas Balancing

- European Commission invited ENTSOG in Nov 2011 to draft and submit a **Network Code on Gas Balancing** (NC BAL) by end of 2012
- Aim was to establish liquid wholesale markets in Europe and to decrease market entry barriers by ensuring **transparent and fair balancing provisions**
- Following extensive stakeholder involvement and consultation, the draft NC BAL was submitted for comitology in spring 2013 and finally entered into force on 16 April 2014
- Due to different levels of market maturity, NC BAL allowed for different implementation deadlines and interim measures where required – **full compliance** is required as of 16 April 2019

Implementing NC BAL

**Standard application /
no interim measures**

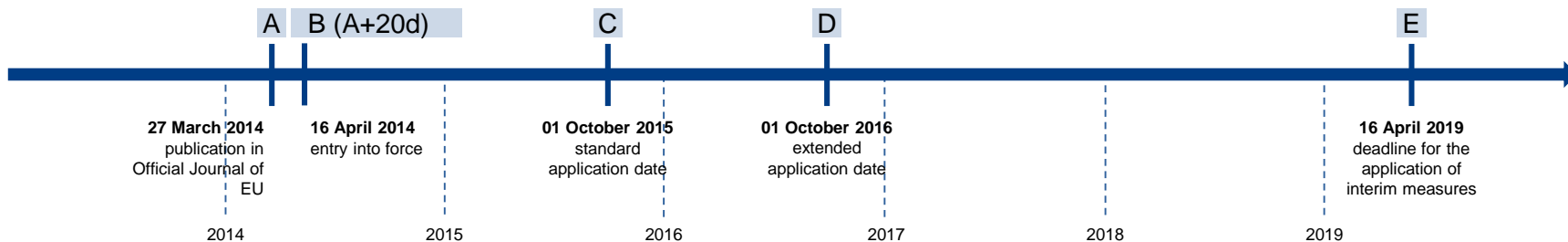
- Standard Case

**Extended application /
no interim measures**

- Extension subject to NRA approval

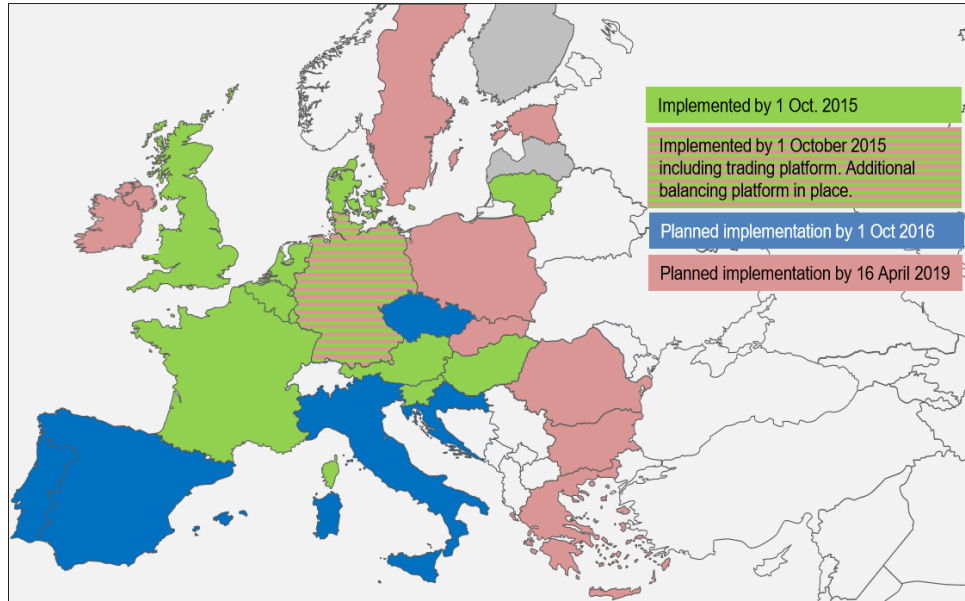
**Standard application
with interim measures**

- Application as of 1 October but “softened” with interim measures
- Subject to NRA approval and yearly report on transition



Application of NC BAL in the EU

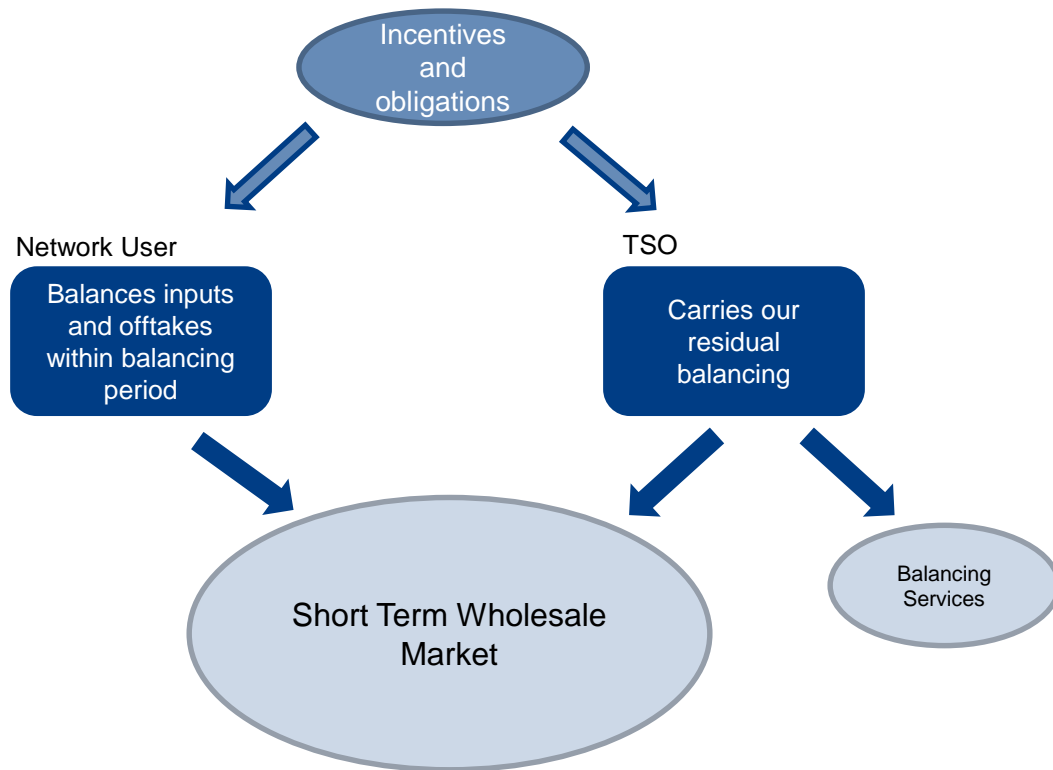
Implementation of NC BAL in EU Member States



Source: ENTSOG

- **Standard application** of NC BAL mostly in more “mature” markets (e.g. NL, BE, DE)
- **Extended application** mostly in markets where trading facilities are in place but don't provide sufficient liquidity yet (e.g. ES, IT)
- **Interim Measures** mostly in markets that don't provide trading facilities (e.g. PL, BU)
- Specific German case: standard application but balancing platform as interim measure due to system requirements

The Balancing Target Model of NC BAL



- TSOs and NUs primarily make use of the Short Term Wholesale Market to balance
- Since NUs are incentivised to balance inputs and offtakes, the TSO performs only residual balancing
- Where TSOs have a specific balancing demand that cannot be met with standard products, they may use balancing services

Operational Balancing

Merit Order of Balancing Products

- TSOs are required to follow a merit order of balancing products to physically balance their system:



Title products on a trading platform
(Within Day and Day Ahead)

Locational, temporal and/or temporal locational products on a trading platform
(Within Day and Day Ahead)

Balancing services
(max. 1 year contract duration)

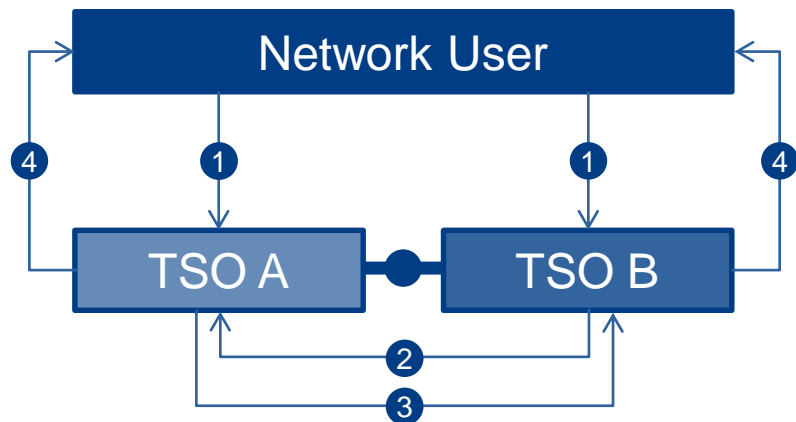
Trading platform:

- Offers trading of short term standardised products (STSPs)
- Allows transparent and non-discriminatory access
- Provides services on an equal basis to all participants
- Ensures anonymous trading at least until conclusion of deal
- Notifies TSO about concluded deals

Nominations

Nomination procedures

- NC BAL defines standard nomination procedures and lead-times for the transport of gas between the networks of TSOs in the EU:

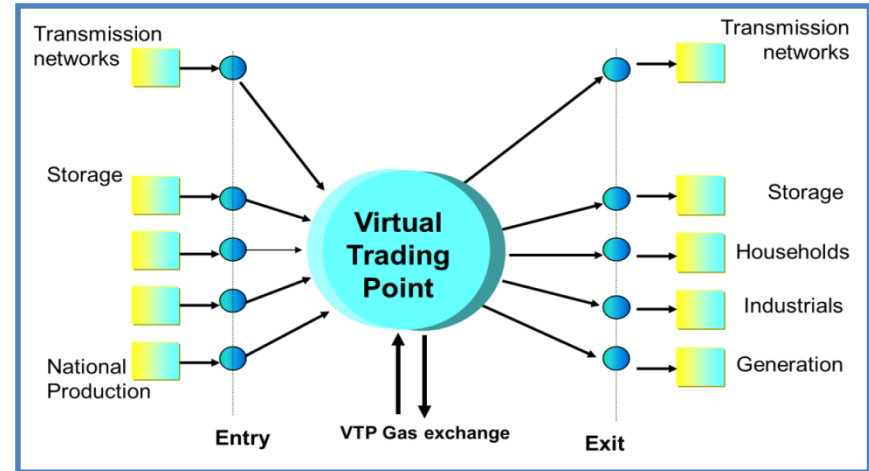


1. NU provides initial nomination no later than D-1 14:00 and re-nominations no later than 2 hours before gas flow to both TSOs
2. “Passive TSO” submits processed quantities (taking into account e.g. capacity check) to designated “active TSO” for matching process
3. “Active TSO” submits processed quantities as matching result back to “passive TSO”
4. Both TSOs respond to NU informing about processed quantities no later than 2 hours after the start of the nomination / re-nomination cycle

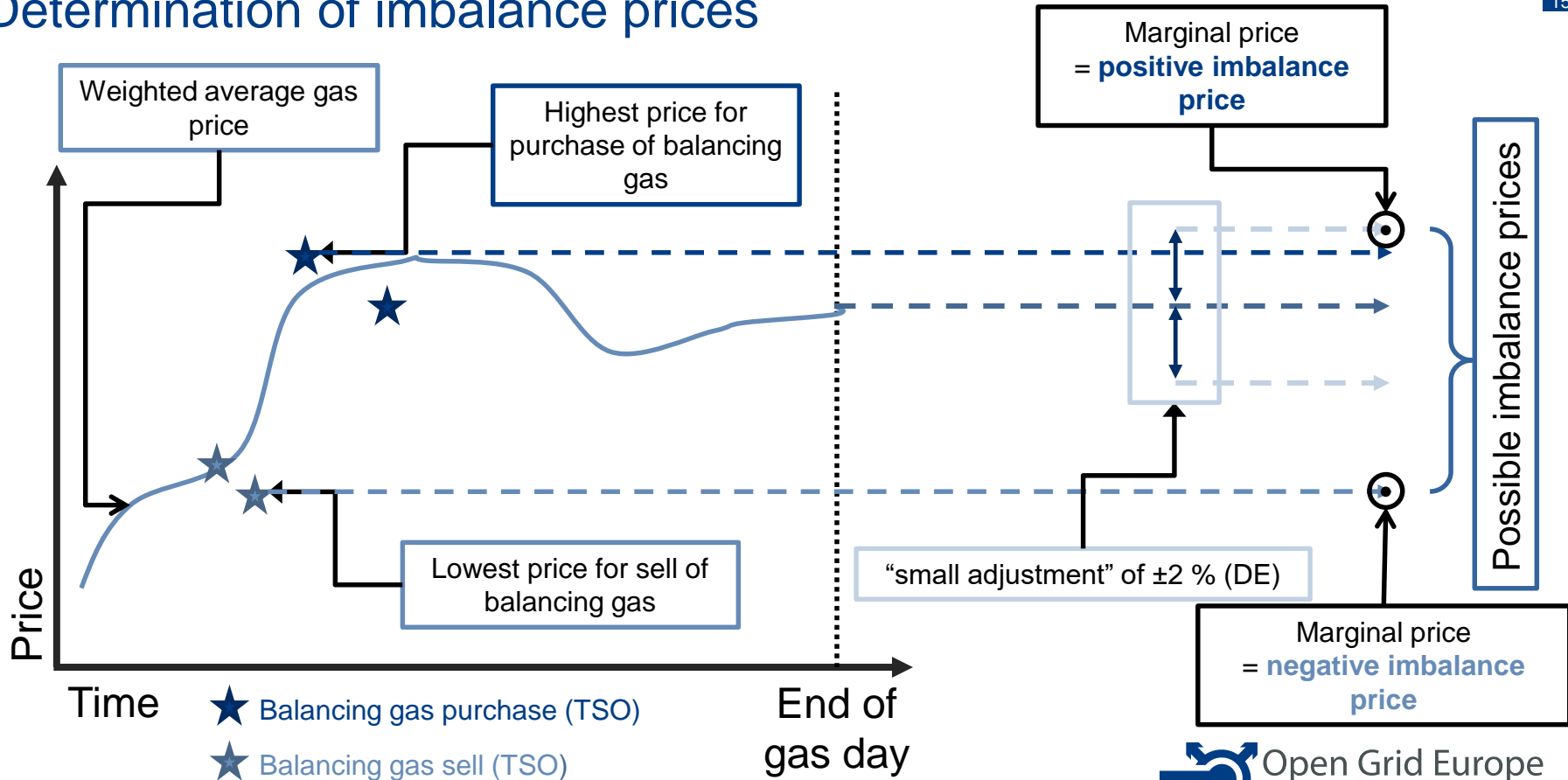
Daily Imbalance Charges

Daily settlement of imbalance quantities

- Standard balancing period is the gas day (06 – 06)
- All inputs and offtakes of a NU are allocated to its individual balancing portfolio
- At the end of each gas day, daily inputs and offtakes in the balancing portfolio are compared:
 - Inputs = Offtakes: portfolio is balanced and no action
 - Inputs > Offtakes: “long position” is settled as being sold to the TSO at the negative imbalance price
 - Inputs < Offtakes: “short position” is settled as being bought from the TSO at the positive imbalance price



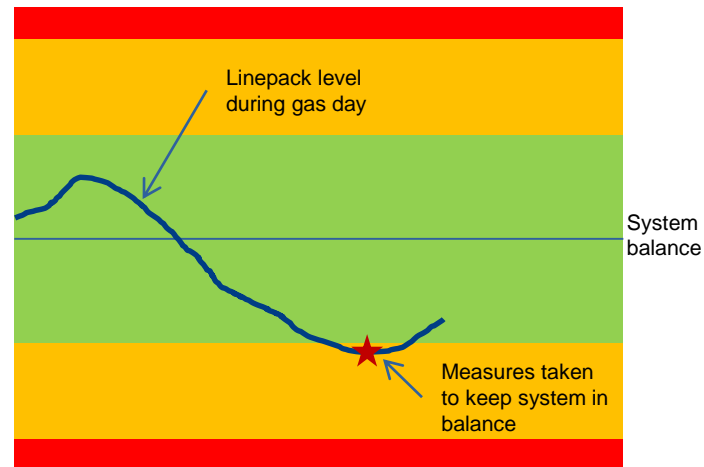
Determination of imbalance prices



Within Day Obligations

Application of Within Day Obligations

- NUs must balance their portfolio until the end of the gas day
- Where required, TSOs may additionally apply Within Day Obligations (WDO), subject to consultation and NRA approval
- Three versions are possible:
 1. **System-wide** (keeping the system in total within a predefined range)
 2. **Portfolio-based** (keeping individual NU portfolios within a predefined range during the gas day)
 3. **Point-based** (keeping flows or variations of flows at specific points within a predefined range)

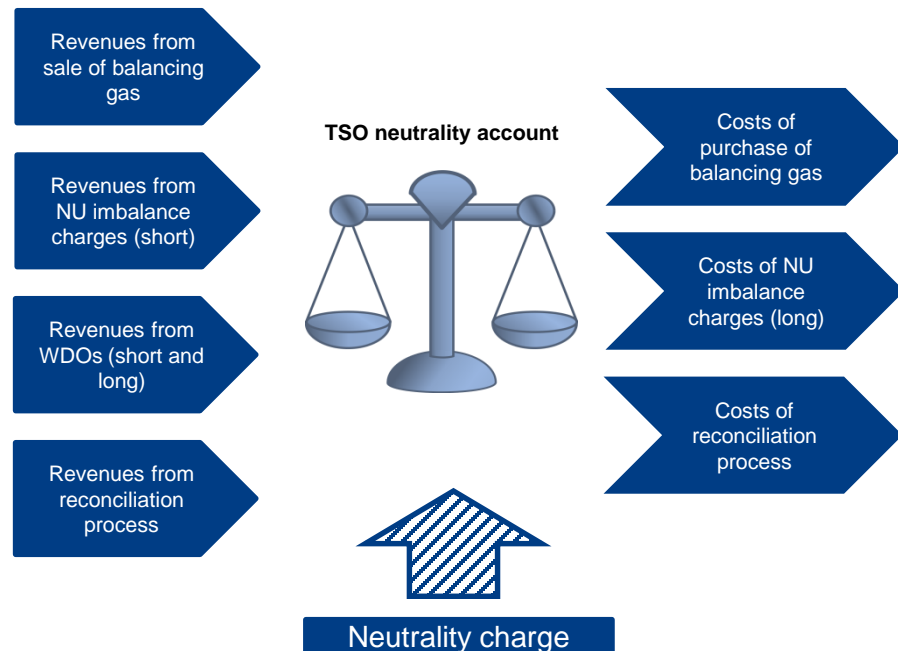


Example of System WDO

Neutrality Arrangements

Balancing Neutrality Arrangements

- Balancing system is financially neutral for the TSO
- Costs and revenues linked to balancing feed into a balancing neutrality account separate to other activities of the TSO
- Costs/revenues for balancing gas should more or less equal costs/revenues for imbalance cash outs due to causer principle and cost-reflective cash out prices
- TSOs may charge a neutrality levy to NUs when balancing neutrality account is not balanced



Information Provision

Consumer groups defined by NC BAL

- For NUs to balance their portfolio, sufficient and timely information on inputs and offtakes is vital, especially on the consumption of end consumers
- NC BAL therefore distinguishes three consumer groups and defines minimum information requirements:
 - **Non-daily metered consumers:** household consumers and small commercial consumers that are typically metered once a year, for which daily consumption is calculated based on one of three available mechanisms (Base Case, Variant 1, Variant 2)
 - **Daily metered consumers:** small and medium commercial consumers that are metered at the end of each gas day
 - **Intraday metered consumers:** large commercial and industrial consumers that are metered several times (at least three times) during / at the end of each gas day

Information provision from TSO/DSO to NU

	Intraday metered	Daily metered	Non-daily metered		
			Base case	Variant 1	Variant 2
D-1	N/A	N/A	Preliminary forecast of consumption	N/A	Binding forecast (relevant for settlement)
D	Updates on metered consumption at least twice during the day	N/A	Updates on preliminary forecast of consumption at least twice during the day	Updates on calculated consumption based on apportionment of flows	N/A
D+X	Metered consumption	Metered consumption	Final forecast of consumption (relevant for settlement)	Final calculated consumption based on apportionment of flows	N/A

Interim Measures

Interim measures of NC BAL

- Where necessary (e.g. due to lack of market maturity), TSO may apply interim measures until no later than 16 April 2019 and subject to the approval of the NRA
- Interim measures may include:
 - **Balancing Platform:** where short term wholesale market is deemed not sufficiently liquid enough or where temporal and/or locational products cannot be reasonable procured in this market
 - **Interim imbalance charge:** where standard imbalance price methodology cannot be reasonably applied, a proxy may be applied instead
 - **Tolerances:** where e.g. information level is not sufficient for NUs to balance their portfolio, NUs may be granted tolerances on daily imbalance calculation
- TSOs applying interim measures are required to take mitigating measures towards full application of NC BAL and report on these in an annual report

Thank you very much