

GAS MARKET IN POLAND

Warszawa, 12 April 2022



EUROPEAN REGULATIONS

- ▶ Regulation (EC) No 715/2009 – Regulation on conditions for access to the natural gas transmission networks
- ▶ CMP – **C**ongestion **M**anagement **P**rocedures – part of Regulation (EC) No 715/2009
- ▶ **N**etwork **C**odes – Regulations (EU) establishing a Network Codes
 - ▶ NC CAM – **C**apacity **A**llocation **M**anagement
 - ▶ NC BAL – **B**alancing
 - ▶ NC INT – **I**nteroperability and Data Exchange
 - ▶ NC TAR – **T**ariffs



NATIONAL REGULATIONS

- ▶ Energy Law
 - ▶ Regulation on detailed terms of operation of the gas system
 - ▶ Regulation concerning detailed principles of tariff design and calculation, and settlements in gas trade

- ▶ The Act on stocks of crude oil, petroleum products and natural gas, the principles of proceeding in circumstances of a threat to the fuel security of the State and disruption on the petroleum market



GAZ-SYSTEM RULES



- ▶ National Transmission System:
 - ▶ Transmission Network Code
 - ▶ Tariff
 - ▶ Plan of restrictions on natural gas consumption
- ▶ Polish part of Transit Gas Pipeline System (ISO)
 - ▶ Transmission Network Code of TGPS
 - ▶ Tariff of TGPS

GAZ-SYSTEM NETWORK CODE

- ▶ The first version published in 2005
- ▶ The code sets forth the rules of the system functioning and obligations towards transmission system users
- ▶ The code implements provisions deriving from the EU network codes and framework guidelines:
 - ▶ CMP FG
 - ▶ CAM NC
 - ▶ BAL NC
 - ▶ IO NC
- ▶ Obligation on the TSO to cooperate with the Gas Exchange in the defined areas
- ▶ Current version is v28 dated December 2020



**Gas Transmission Operator
GAZ-SYSTEM S.A.**

**TRANSMISSION NETWORK CODE
(TNC)**

COOPERATION WITH POLISH POWER EXCHANGE



- ▶ Cooperation has begun in December 2011:
 - ▶ Operation agreement signed in 2011
 - ▶ First transaction was concluded in December 2012 for January 2013
- ▶ GAZ-SYSTEM's Transmission Network Code obliges TSO and gas exchange to cooperate in the following issues:
 - ▶ transactions are concluded at the Virtual Trading Point
 - ▶ In the nomination process for the Gas Exchange Virtual Trading Points (on behalf of ZUP)
- ▶ Agreement concerning purchase of gas by TGE members are executed by TGE and GAZ-SYSTEM

BALANCING AREAS IN POLAND

H-gas balancing area

L-gas balancing area

TGPS balancing area (transit)



H-GAS BALANCING ZONE – CHARACTERISTICS

64 entry points

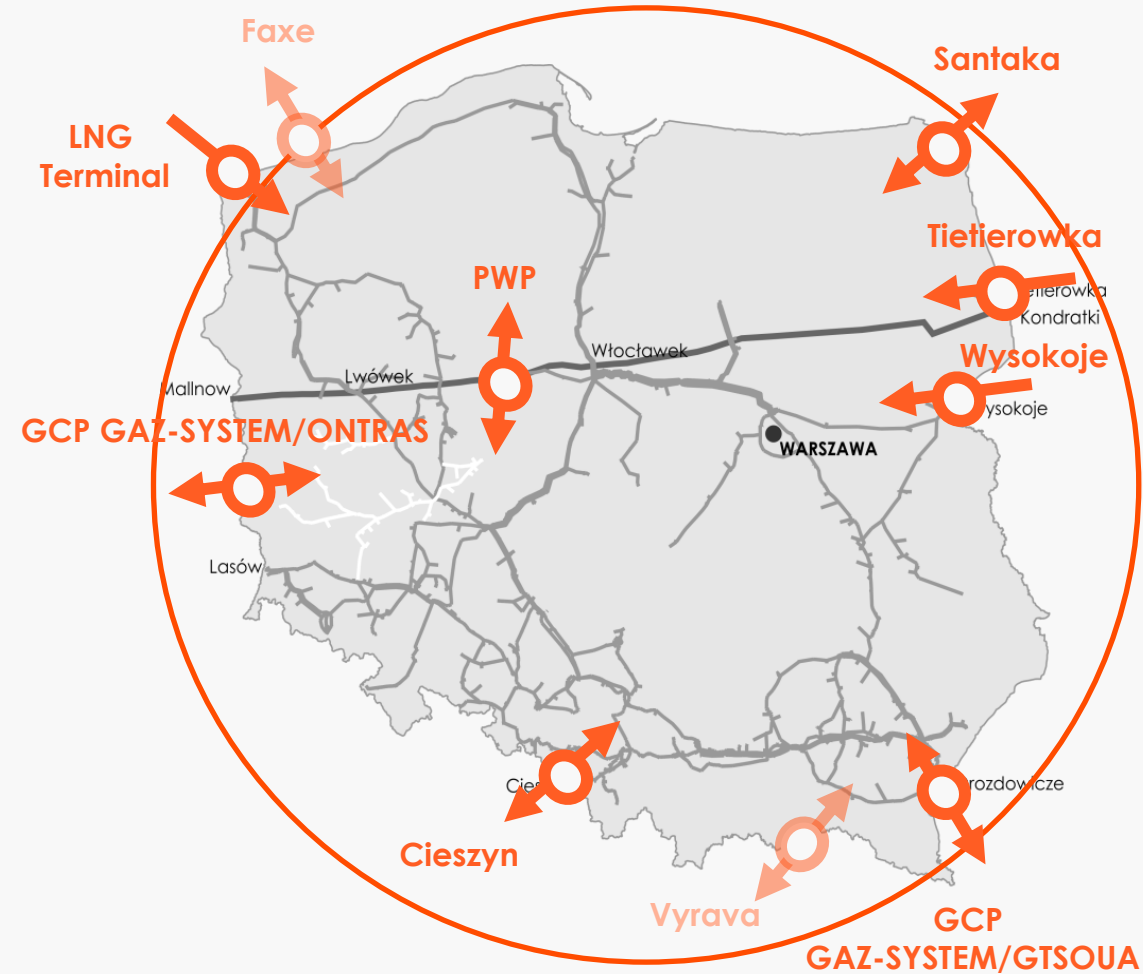
- ▶ IPs
- ▶ LNG Terminal
- ▶ Production

904 exit points

- ▶ IPs
- ▶ End users (industry)
- ▶ DSOs (23)

▶ Interconnection points:

- ▶ **PL ↔ UA:** GCP GAZ-SYSTEM/GTSOUA
- ▶ **PL ↔ CZ:** Cieszyn
- ▶ **PL ↔ DE (ONTRAS):** GCP GAZ-SYSTEM/ONTRAS
- ▶ **PL ↔ TGPS:** PWP
- ▶ **PL ↔ LT:** Santaka
- ▶ **PL ↔ DK:** Faxe
- ▶ **PL ↔ SK:** Vyrava



TGPS BALANCING ZONE - CHARACTERISTICS

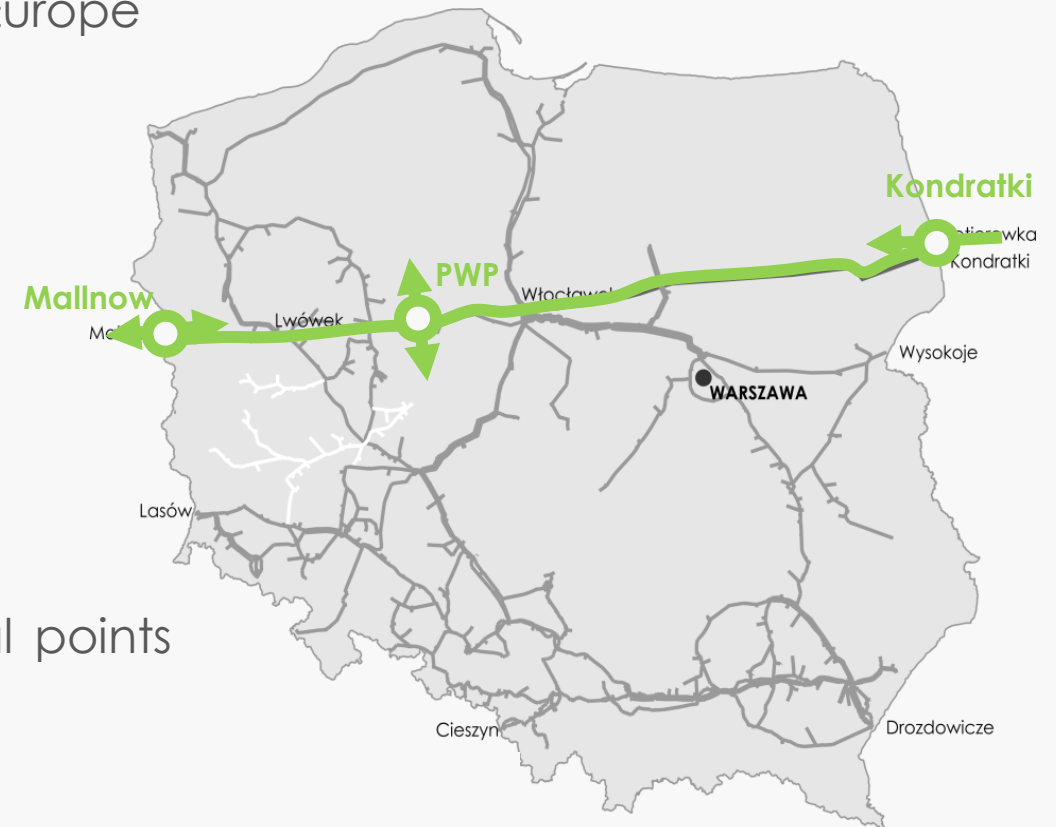
TGPS – Polish part of the Transit Gas Pipeline System Yamal - Europe

➤ Entry points:

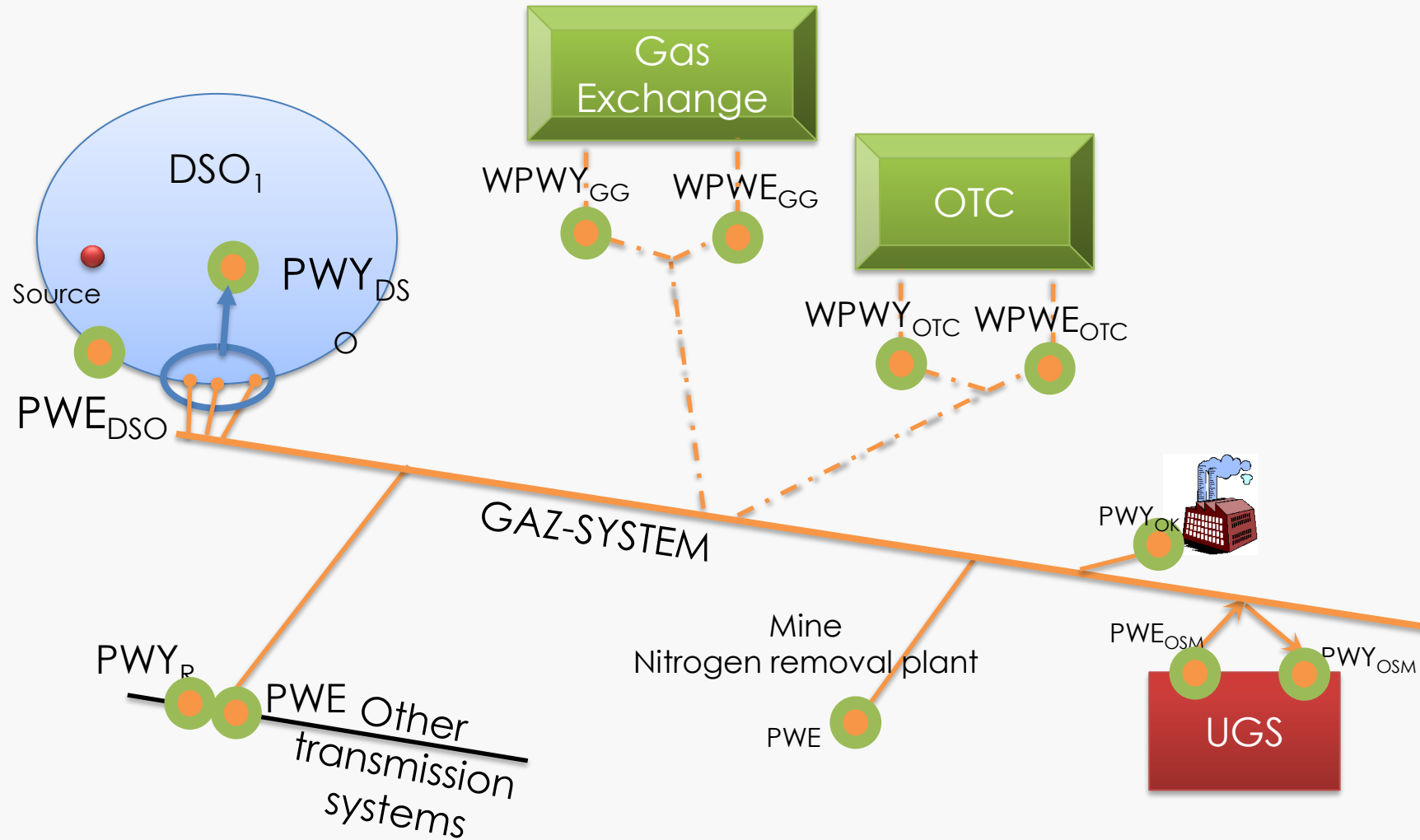
- **Kondratki** (connection point, Belarus)
- **Mallnow** (connection point, THE - Gascade)
- **PWP reverse** (contractual connection point, H-gas balancing zone)

➤ Exit points:

- **Mallnow** (connection point, THE - Gascade)
- **PWP** (virtual interconnection point based on physical points between TGPS and H-gas balancing zone)

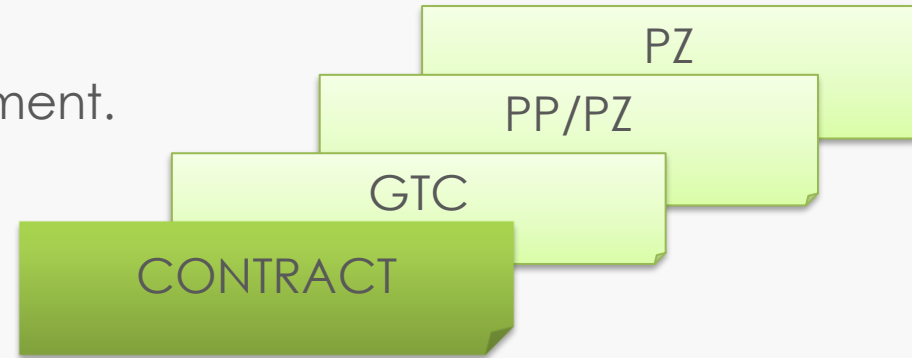


CONTRACTUAL POINTS – CURRENT MODEL



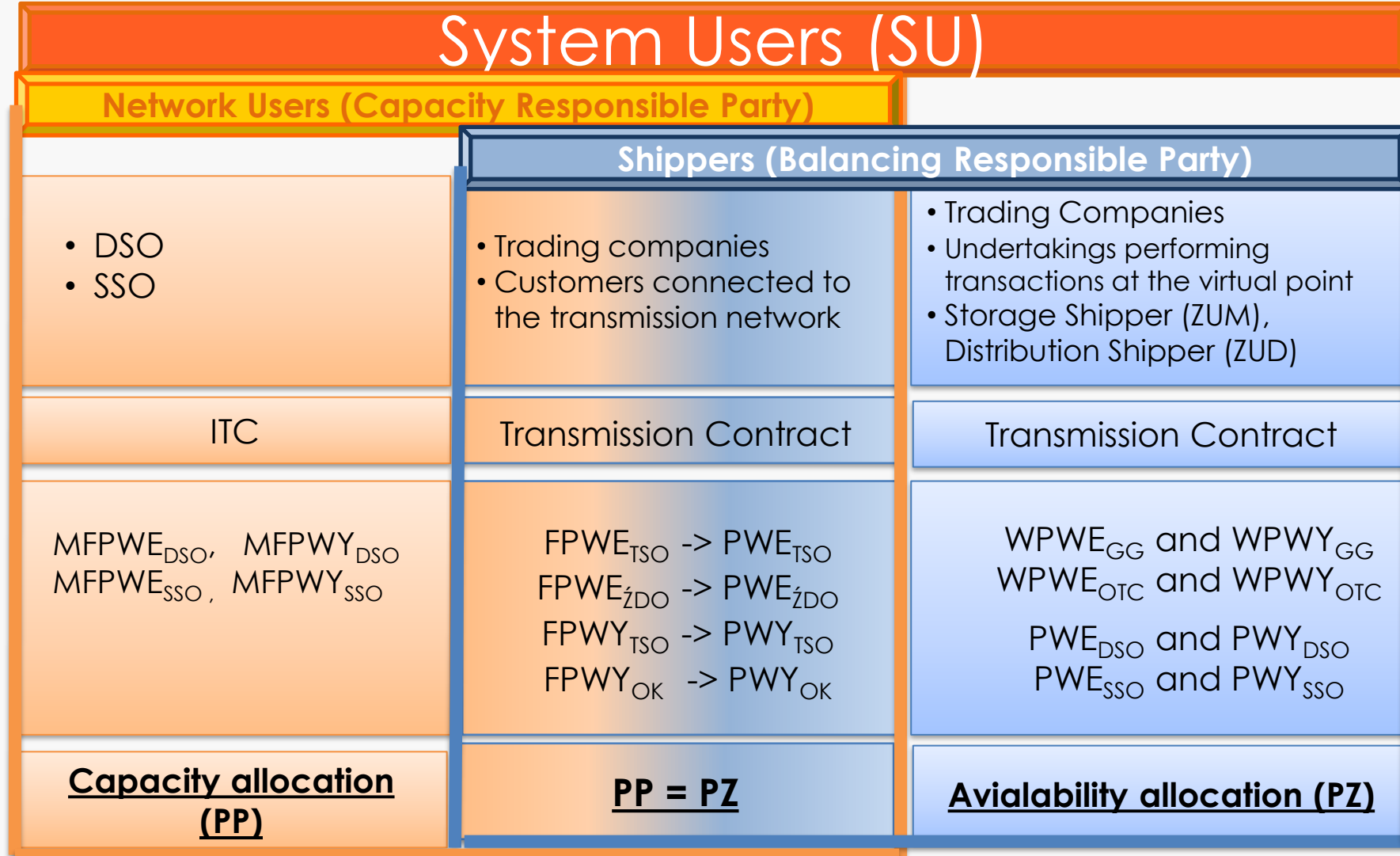
TRANSMISSION CONTRACT

1. The transmission contract is a framework agreement.
2. GTC is a part of transmission contract.
3. Each framework contract has a separate PP or PZ for specific points.

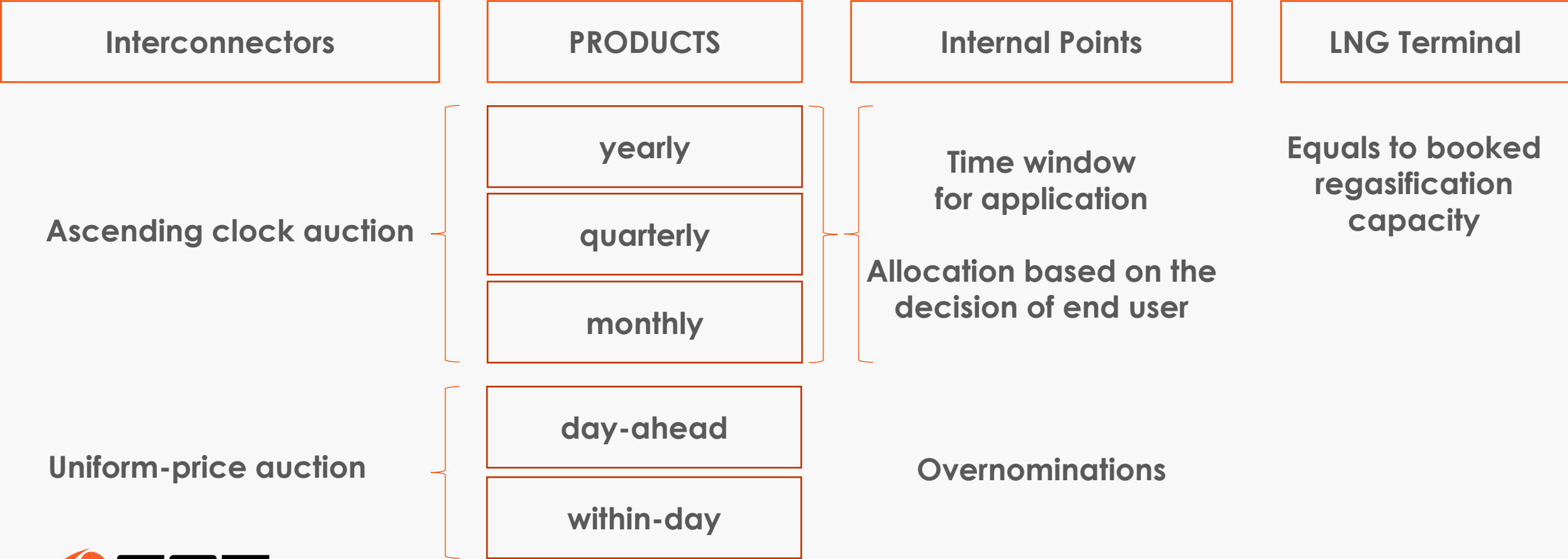


Capacity Allocation (PP)	Availability Allocation (PZ)
<ul style="list-style-type: none">• Physical entry/exit point	<ul style="list-style-type: none">• Entry/exit points
<ul style="list-style-type: none">• Duration of PP for a given point	<ul style="list-style-type: none">• Duration of PZ for a given point
<ul style="list-style-type: none">• Type of capacity – firm/interruptible	

GAS MARKET PLAYERS



PRIMARY CAPACITY MARKET



SECONDARY MARKET

- ▶ Over-the-counter (OTC)
- ▶ First come, first served (FCFS)
- ▶ Call for orders (CFO)

Internal points – on the GSA Platform

Interconnectors – on the relevant booking platform

CAPACITY BOOKING PLATFORMS

GSA PLATFORM



CAPACITY BOOKING PLATFORMS

RBP*



GCP GAZ-SYSTEM/ONTRAS

MALLNOW

GAZOCIĄG JAMAŁSKI

PWP
PUNKT WZAJEMNEGO
POŁĄCZENIA

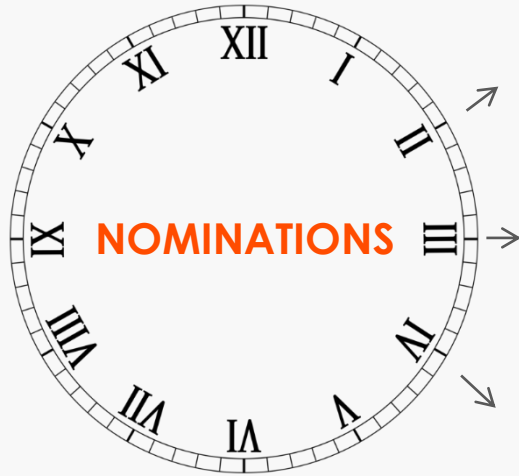
AVAILABILITY ALLOCATION (PZ)

1. **Availability allocation (PZ)** is a confirmation of right to use the entry or exit points.
2. Based on PZ for the entry and exit points:
 - a. nominations may be submitted,
 - b. allocation of the quantity of the gaseous fuel is performed,
 - c. imbalancing is calculated.
3. The entity authorised to use the entry or exit point is called the **BRP (ZUP)**.
4. PZ for the contract points, including the Virtual Points, is free of charge.

NOMINATIONS - GENERAL PRINCIPLES

- ▶ **Nomination procedure** (BAL NC)
 - ▶ day ahead nomination
 - ▶ intraday renomination
 - ▶ **Hourly quantities** for contractual entries and exits
- ▶ **Notification procedure connected with VTP entry/exit**
 - ▶ Based on gas exchange trade
 - ▶ sent to TSO by gas exchange operator (TGE)
 - ▶ „a priori” confirmed
 - ▶ Based on OTC trade
 - ▶ sent to TSO by sides of transactions
 - ▶ must be matched (lesser rule)

NOMINATION/ RENOMINATION CYCLES (BAL NC)



D-1 14:00 CET and 15:00 EET

Nomination deadline for gas day D (**NOMINT**)

D 3:00 CET and 4:00 EET

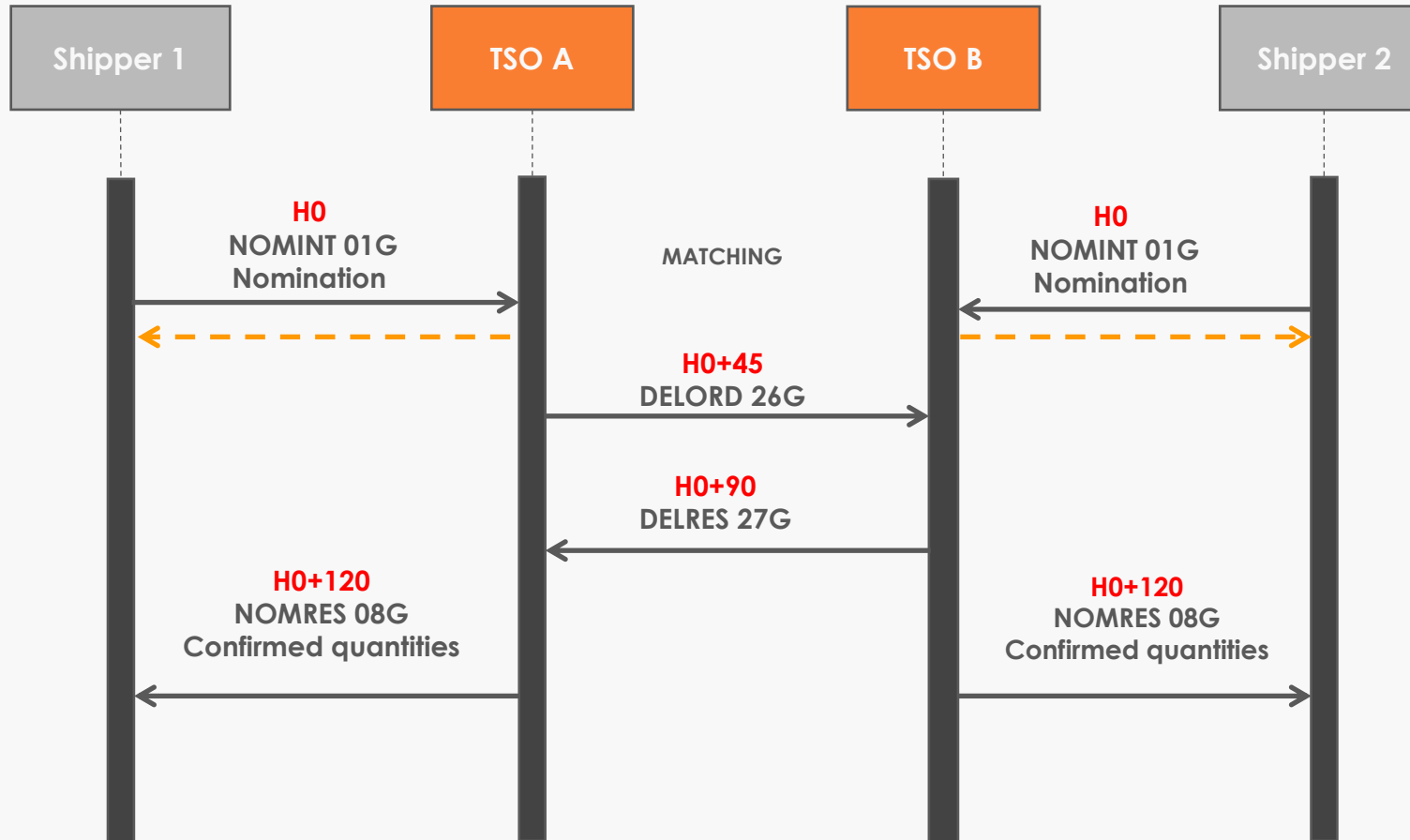
Last possible renomination (**NOMINT**) for gas day D (quantity change for last hour of gas day)

D-1 16:00 CET and 17:00 EET

- Confirmation deadline (rejection / confirmation of nomination) for gas day D (**NOMRES**)
- Start of renomination procedure for gas day D (renomination cycle starts every hour)

- **Two hour lead time** is required for renominations.
- In case of not preserving that rule, **renomination is rejected**.

NOMINATION AND MATCHING PROCESS



NOMINATIONS – DATA EXCHANGE (INT NC)

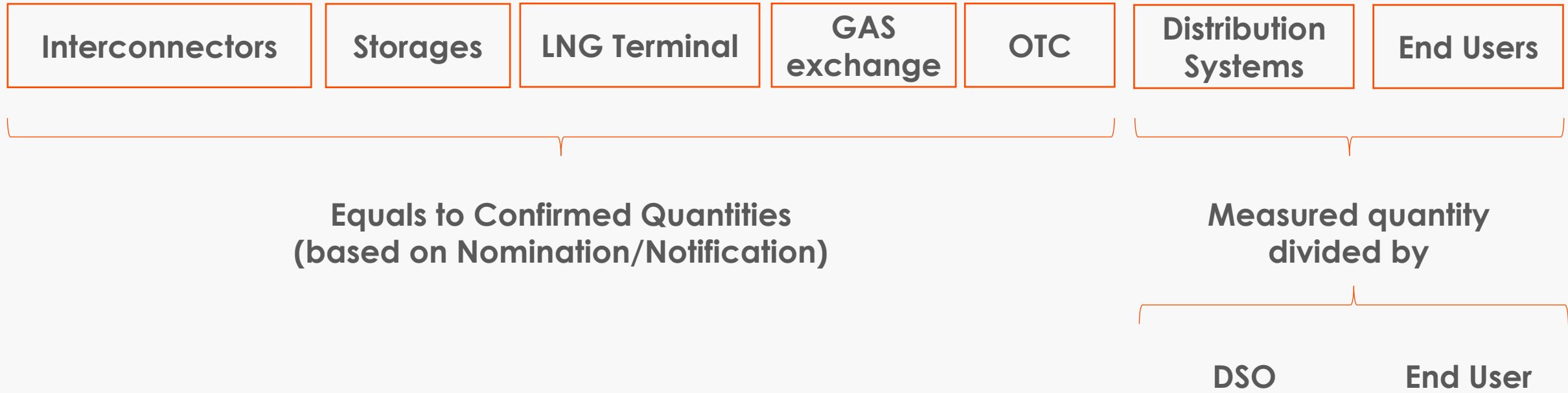
- ▶ Document based and interactive data exchange
- ▶ **Data exchange format: Edig@s – XML** (4.0. or **5.1.** version):
 - ▶ Messages: NOMINT, ACKNOW, NOMRES
- ▶ **Data exchange protocol: AS4**



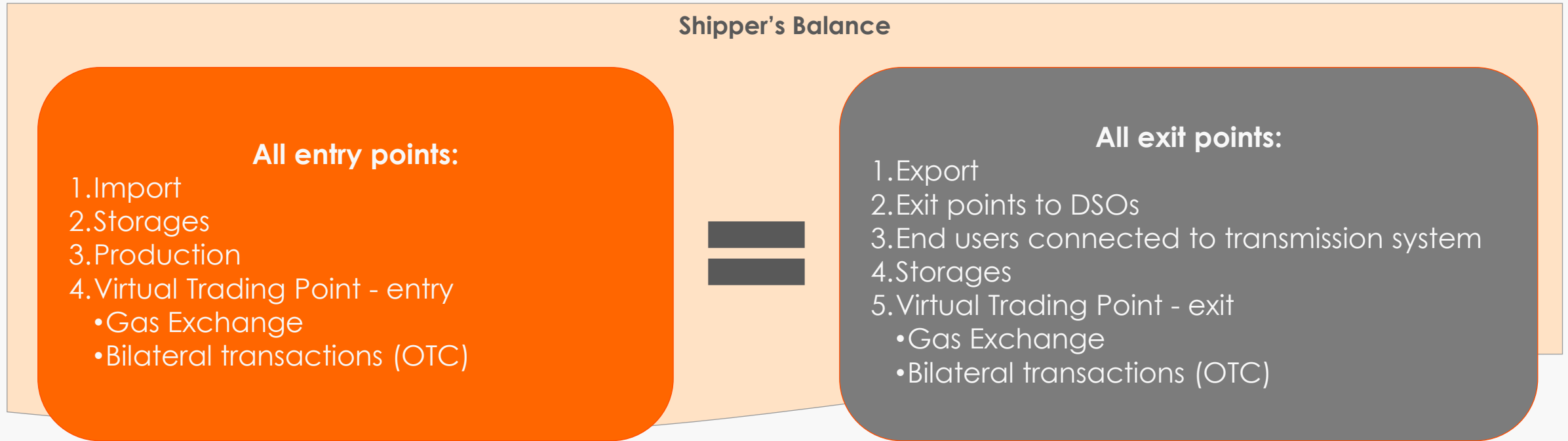
- ▶ **Interactive data exchange** - possibility to use web-portal - Information Exchange System IES - for submitting nomination (edig@s messages are automatically generated in Edig@s 5.1)

A login form for the Exchange Information System. It includes fields for 'Login' and 'Password', 'Sign in' and 'Join now' buttons, and a 'Forgot password?' link.

ALLOCATIONS



COMMERCIAL BALANCING

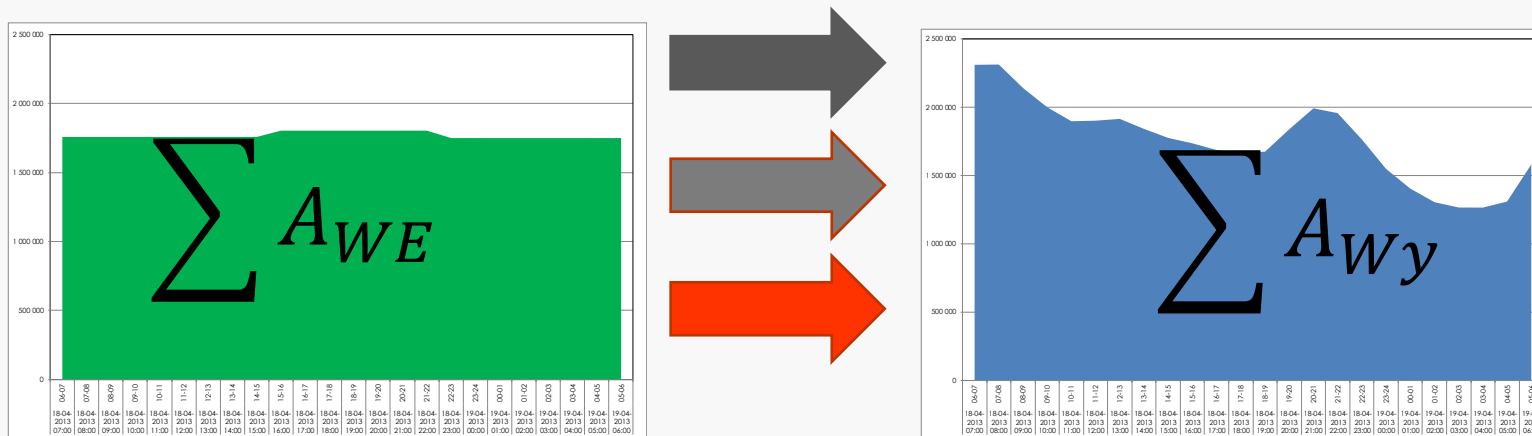


▶ Daily balancing regime

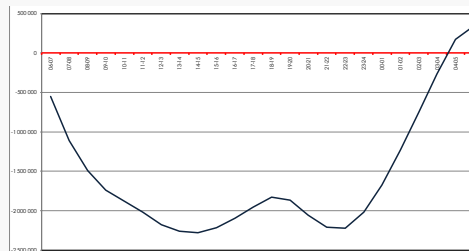
- ▶ Shipper's provisional imbalance is calculated after 4 hours, 8 hours of gas day and after gas day
- ▶ Final imbalance calculated after the end of the gas month, based on final allocations
- ▶ **Imbalance settlement for each gas day (based on final allocations)**

DAILY BALANCING

TSO calculates **Shipper's Daily Imbalance** for each gas day as **difference between gas amount delivered at entries and withdraw at exits** from balancing area/zone by **Shipper at each gas day**.



$$DIN = \sum A_{WE} - \sum A_{Wy}$$



IMBALANCE CHARGE – H-GAS BALANCING AREA

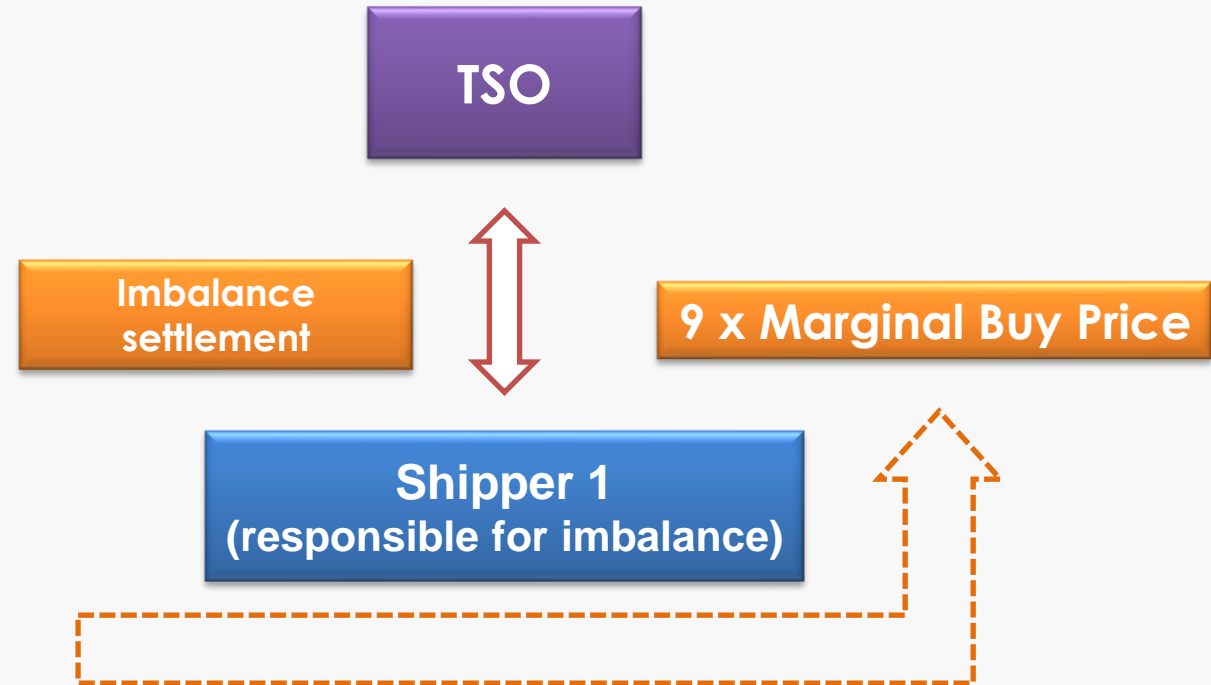
Marginal prices in accordance with BAL NC

- ▶ **Marginal Sell Price (KCS)** equals to the lower of the two following prices:
 - ▶ lowest price of any sales of title products, in which the TSO is involved in respect to the given gas day,
 - ▶ **CSRB** in relation to this gas day, **reduced by 10%**.
- ▶ **Marginal Buy Price (KCK)** equals to the higher of the two following prices:
 - ▶ highest price of any purchases of title products, in which the TSO is involved in respect of the given gas day,
 - ▶ **CSRB** in relation to this gas day, **plus 10%**.

CSRB is the volume-weighted average price from all transactions of TGE (Gas Exchange) session of the Intraday Market (RDBG), related to the present gas day (index TGEgasID).

BALANCING GROUPS – IMBALANCE SETTLEMENT

Balancing group	Imbalance
Shipper 1 (responsible for imbalance)	- 20
Shipper 2	+ 1
Shipper 3	+ 10
total	-9



Imbalance settlement just between TSO and Shipper 1

FINANCIAL SECURITY

- ▶ The amount of the financial security provided by the System User, for each gas day, cannot be lower than:
 - ▶ 125% of the value of the System User's obligations to the TSO for a given gas day being the sum of:
 - ▶ the System User's unpaid liabilities (including liabilities that have not yet matured) resulting from invoices issued by GAZ-SYSTEM to the System User less the liabilities of GAZ-SYSTEM to the System User resulting from the Commercial Transmission Report (HRP) that have not been paid by GAZ-SYSTEM, and
 - ▶ System User's liabilities resulting from the amount of a potential imbalance charge established on the basis of the balance of mutual liabilities of GAZ-SYSTEM and the System User for all gas days that have not yet been covered by an invoice for balancing. The balance of mutual liabilities is determined as the product of the operative Daily Imbalance Quantity (DIN) and the monthly Average Balancing Settlement Price (CSRB) published on the GAZ-SYSTEM's website for the previous month,
 - ▶ two times the fee for transmission services provided during a given gas month, determined on the basis of the capacity allocation (PP) of a given System User and the applicable Tariff,
 - ▶ 150,000.00 PLN in case when the System User has obtained a transmission ability allocation (PZ).
- ▶ Depending on which of the aforementioned values is the highest for a given gas day.

<https://www.gaz-system.pl/en/for-customers/services-in-the-nts/gas-transmission-through-the-nts/nts-transmission-contract/financial-security-of-the-ransmission-contract.html>

OTHER LEGAL OBLIGATIONS

- ▶ Mandatory stock
 - ▶ Entity which delivers gas to Poland is obliged to store amount equals to 30 average daily quantity - reference period
 - ▶ Details are described in „The Act on stocks of crude oil, petroleum products and natural gas, the principles of proceeding in circumstances of a threat to the fuel security of the State and disruption on the petroleum market”
- ▶ Trading licences
 - ▶ Licenses are issued by Energy Regulatory Office
 - ▶ <https://www.ure.gov.pl/en/markets/gas/gas-information-package/295,Gas-Information-package.html>

INFORMATION EXCHANGE SYSTEM (IES)

Publication Zone

The place where all the information required by 715/2009 Regulation are published.

Publicly available

Customer Zone

Provides access for the Shippers to all information and activities related to the transmission contracts and services

Log-in required

Contract Database Zone

Internal zone for GAZ-SYSTEM's employees as a source of all services provided by GAZ-SYSTEM.

Log-in required

GAS INSIDE INFORMATION PLATFORM

GIIP GAS INSIDE INFORMATION PLATFORM
HOME
UMM LIST
DOCUMENTS

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THANK YOU FOR YOUR ATTENTION

