

New Gas Market Model

the system that connects



Model Premises

1. Enabling new entities to enter onto the gas market.
2. Enabling gas trade regardless of the physical location in the network in the commercial exchange hub (at a virtual point) including via the commodities exchange.
3. Detaching the physical entry and exit points, namely, enabling gas transport from physical entry points to a virtual point and from a virtual point to physical exit points.
4. Settlements between market participants of the differences in gas volumes introduced to the network and collected from the network, that is, trade imbalance.
5. Settlements with market participants of the costs incurred by the TSO for physical balancing in connection with concluding purchase/sales transactions regardless of the physical determinants of network operations.
6. Simplifying the principles of use of the the system TSO/SFO/DSO/PLNG



Model Premises – scope of changes

1. Product available in virtual point (WWH).
2. Change in balancing principles.
3. Instruments for operator balancing.
4. One Stop Shop – facilitating service acquisition at infrastructure connection SFO/DSO/PLNG.
5. Introducing new types of agreements, e.g. framework agreements, balancing.
6. Introducing capacity auctions.
7. Change in supplier in scope of gas sales contracts and on gas transport level (TSO/DSO).



Products offered at virtual point

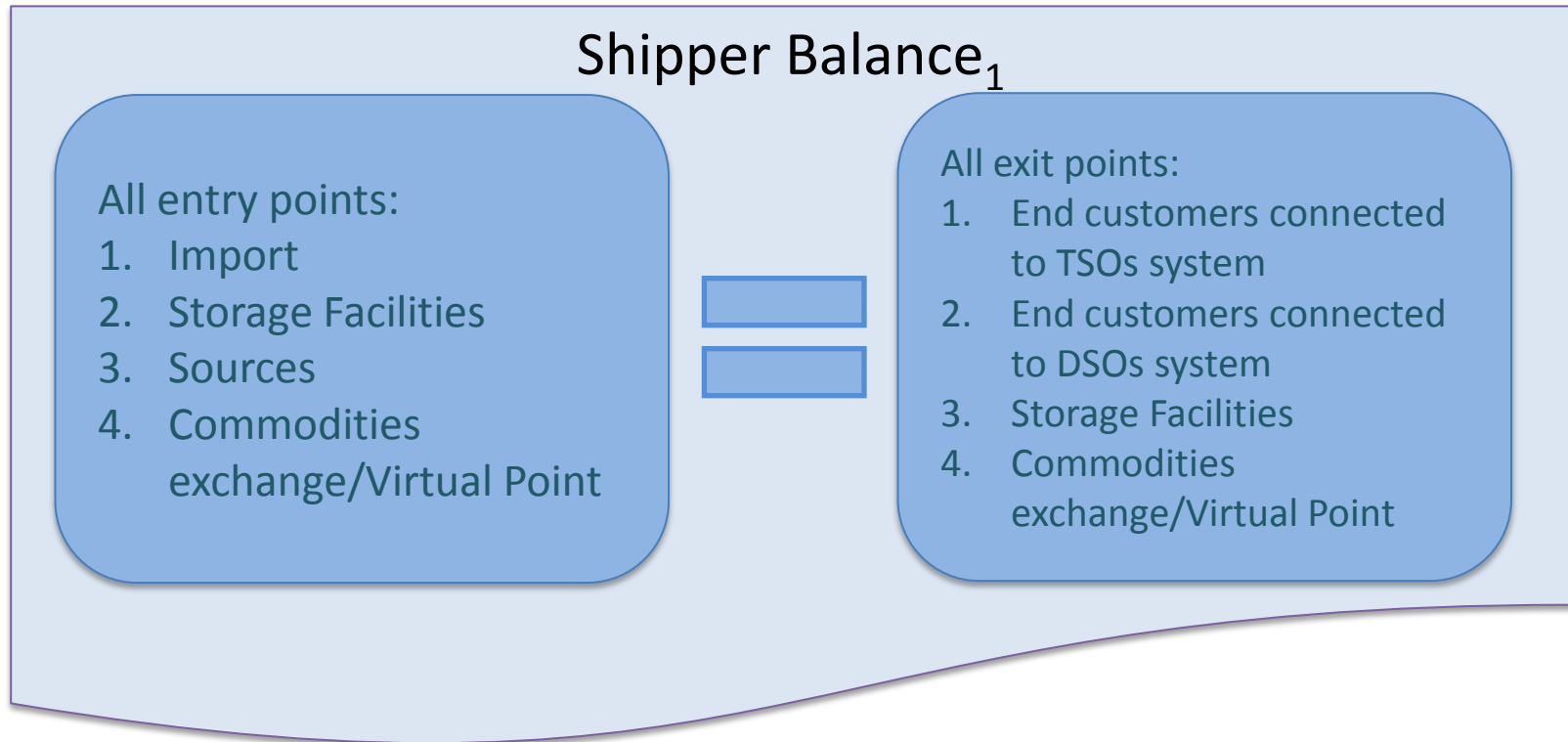
1. Gas in the transmission network is a product at a virtual point.
2. A product offered at a virtual point will be gas - E group high methane natural gas.
3. Trading at a virtual point will not include low methane natural gas (Lw group).
4. Trading will not include gas in closed enclaves (e.g. Białystok region – no connection with system).
5. The product offered at virtual point will not be a dual product comprised of gas and capacity.

Products offered at virtual point

1. Principle - sales agreement concluded on commodities exchange or at virtual point is valid and effective between the parties that concluded it and is subject to performance.
2. Should there be no physical possibility to perform the agreement, the TSO shall perform the agreement using the instruments for balancing.
3. The entity that shall cause the situation of imbalance shall effect a fee on account of the imbalancing based on market mechanisms connected with the balancing costs incurred by the operator.

Products offered at virtual point

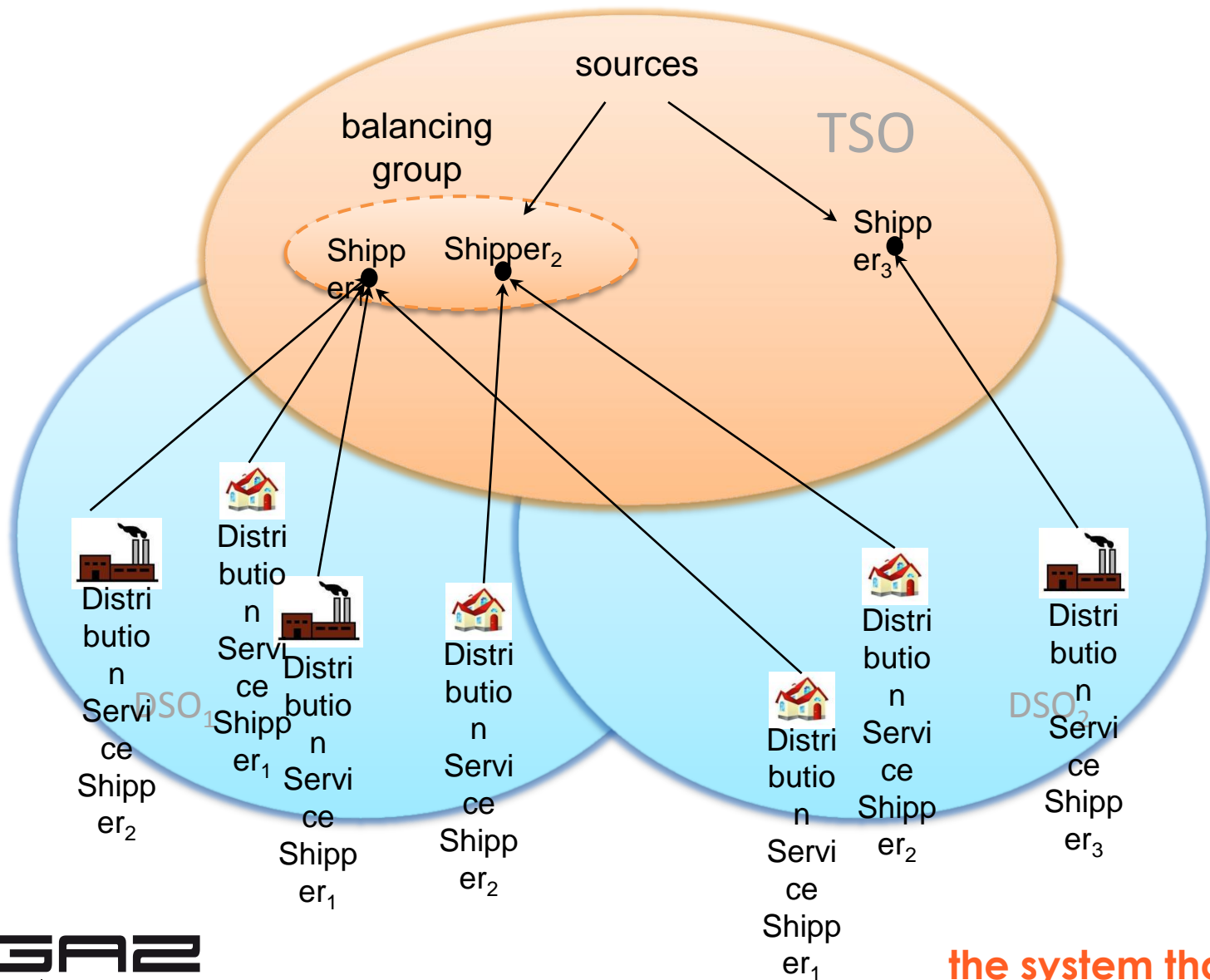
1. On first stage we suggest a flat daily profile on a day-ahead basis.
2. The next stage includes the introduction of products with a varied daily profile and enabling trade during a given gas day – submitted to TSO 2 hours in advance (analogically to re-nominations in current system).
3. Trade unit (minimal) shall be 1 MWh.
4. Nominations to EN/EX from exchange shall be submitted to TSO via exchange by providing the "balance" for given Shipper for EN and EX.
5. Nominations for WWH/Exchanges will be submitted in the same cycles as are foreseen at present for Shippers, resignation from weekly nominations is being considered.



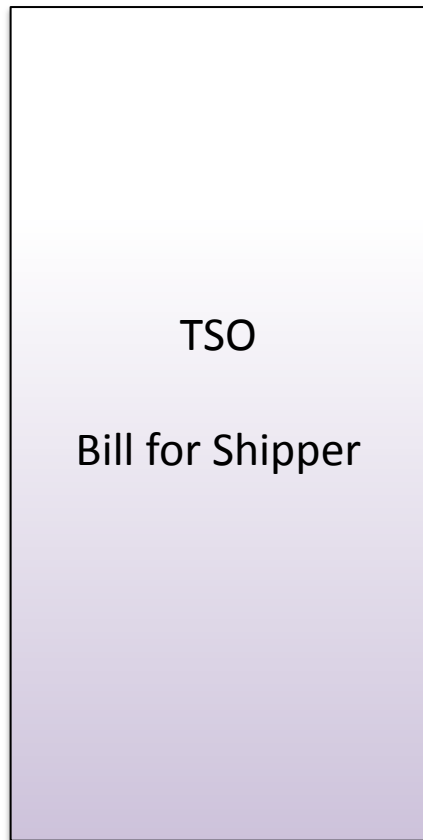
1. All entry points and exit points of a given Shipper (trading company/balancing group) are balanced.
2. The balance is set for each day.
3. Settlements after each day without variation tolerance.

1. Balance of a given Shipper is set based on gas volume allocations.
2. Performance = nomination, for points:
 - entry from EU, where "OBA" accounts are held;
 - virtual/exchange;
 - at connection with SFO, "OBA" accounts with SFO.
3. Performance based on measurement and allocation procedure:
 - entry point from countries outside of EU;
 - end customers connected to TSOs system;
 - end customers connected to DSOs system:
 - WR point – measurement;
 - WS points – allocation proportional to measurement at points on TSO/DSO connection.

Balancing



Information about performed allocation



TSO:

- Entry points
- Storage facilities (PEN/PEX)
- Virtual point (PEN/PEX)

DSO:

- Each DSO for area of own activity shall convey information about the total gas take by each balanced market participant or balancing group

End customer connected to the system of the TSO:

- Divides the amount of variables to each Shipper

Access to storage facility

1. Possibility for real storage facility capacity used by TSO by steering streams of injected natural gas or off-taken from the storage facility
2. Creation of balancing accounts (between TSO and SFO) at UGS connection points with transmission system, in order to ensure greater flexibility and avoidance of necessity to use storage facilities for short periods of time. This solution will enable technical constraints of rendered storage facility services to be minimised while at the same the possibility of increasing their flexibility, in accordance with customer and system demand.

System services

1. Providing instruments ensuring gas supplies, including giving Operators the right to take advantage of the flexibility of the contracts held by the current gas trader and reserves held in UGS. On initial stage, the Polish Oil and Gas Company should be required to perform such services to the Operator
2. Ensuring flexible gas purchase contracts for Operator; supply of certain minimum gas volumes by basic entry points to the system.

Gas Law

1. Operators make available to transmission system operator a part of the storage facility system that the transmission system operator uses to perform its duties. (Article 5 item 3 (GL - Gas Law))
2. The transmission system operator (...) manages injected natural gas streams and off-taken from the storage facility system and a part of the storage facility system that the transmission system operator uses to fulfil its duties. (Article 54¹ item 1 point 1 GL)
3. OBA - Storage facility system operator and regasification system operator conclude with transmission system operator an **agreement on the method of management of operator account by transmission system operator** specifying the natural gas volumes that can be transmitted between operators in order to balance the differences between the volumes specified in the nomination and the volumes actually transmitted to the gas system, compensation principles of operator account balance and settlement principles on account of transmitted or off-taken natural gas at end of agreement validity. (Article 54¹ item 2 GL)



Operator:

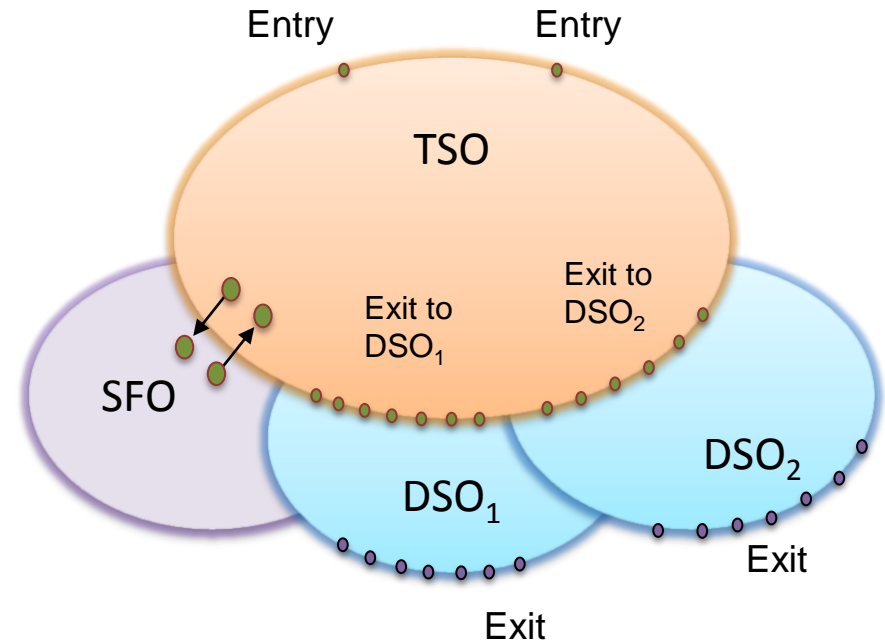
- acquires **system services** from system users, suppliers and customers that are necessary for the correct functioning of the transmission system; (Article 54¹ item 1 point 2 GL)
- manages capacity at connections with other gas systems; (Article 54¹ item 1 point 3 GL)
- (...) specifies the level of capacity reserves and natural gas volumes that should be supplied by network users using the entry points on connections with gas systems of other countries for balancing the current demand for natural gas with natural gas suppliers. (Article 54¹ item 1 point 4 GL)

Gas Law

1. Suppliers introducing natural gas into the gas system are required submit to the transmission system operator **an offer of system services** for a price equalling to their performance costs (Article 54¹ item 4 PG)
2. Gas companies supplying natural gas from the gas systems of other countries (...) are required to:
 - 2) provide system services, including maintaining **capacity reserves** and the possibility of **purchasing natural gas**, in the scope and manner specified in the Code and contract concluded with the transmission system operator;
 - 3) cooperate with the transmission system operator, particularly to (...) carry out the instructions of the TSO, under the principles and conditions specified in the Act, Code and contract concluded with the transmission system operator. (Article 54¹ item 6 PG)

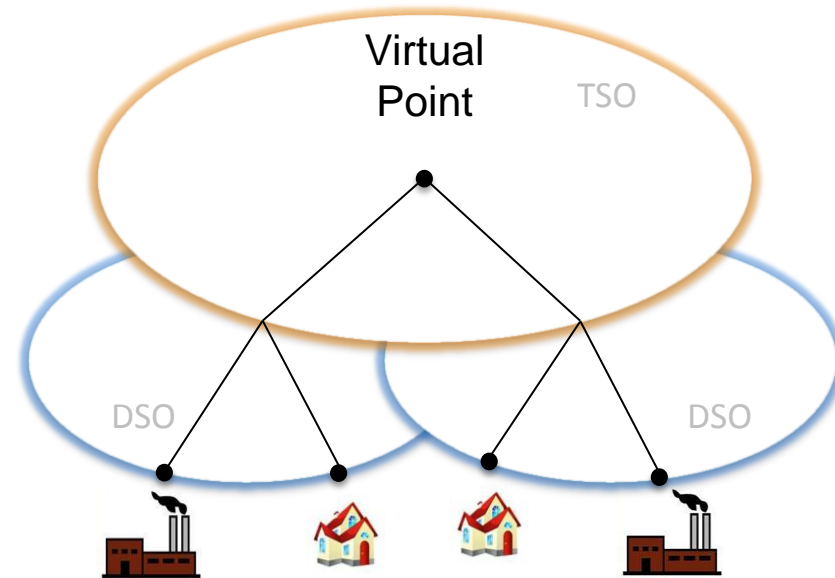
If the transmission system operator will not be able to obtain system services (...) it can submit a request to the President of the ERO to set the conditions for the vital scope of services, including the prices for the performance thereof. (Article 54¹ item 5 PG)

1. In accordance with the Energy Law Act, the following operators shall be responsible for the development of the transmission, distribution and storage facility infrastructure – TSO, DSO, SFO, respectively.



2. Agreements regarding the connection of the systems of the TSO and DSO or TSO and SFO shall be concluded between operators.
3. The DSO and SFO shall specify the volume of the demand for the capacity of the interconnectors.

For the purpose of facilitating trade at a virtual point and gas transport from a virtual point to the off-take locations connected to the distribution networks, we suggest the following:



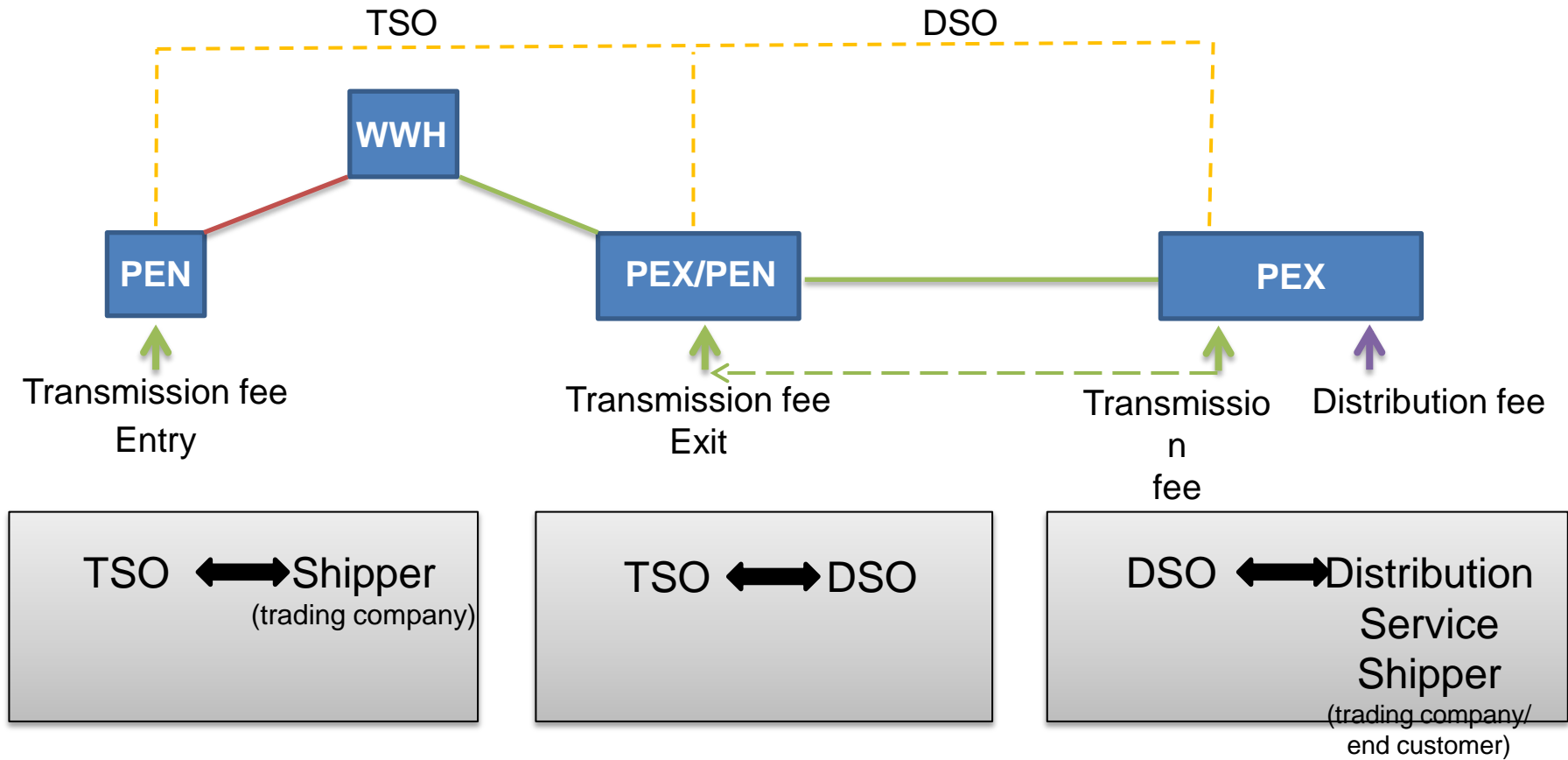
- the end customer (or trading company acting on behalf thereof) concludes an agreement with the DSO for use of the capacity (contracted capacity) at the exit point, within which the capacity from the virtual point via the TSO/DSO connection is ensured.

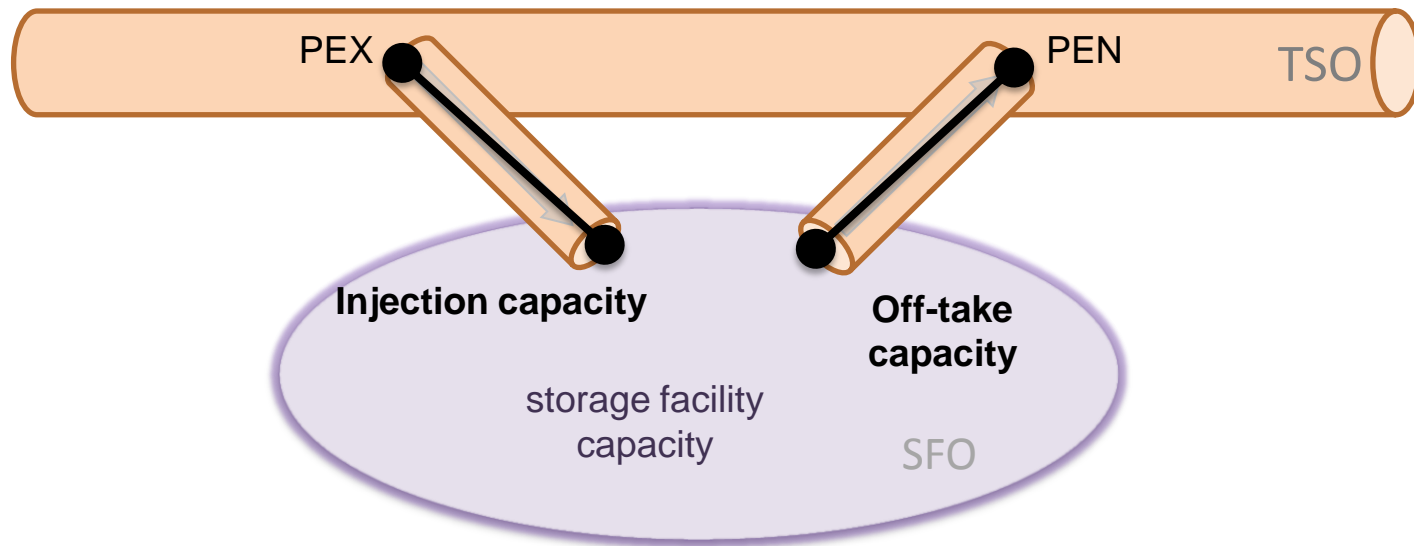
- The end customer or trading company acting on behalf of the end customer shall effect payment to the DSO a capacity fee for Exit in the DSOs system and Exit in TSOs system.
- The gas transport route to the end customer shall be agreed between the DSO and the TSO. The DSO shall reserve at the TSO contracted capacity at the connections of both systems.
- Establishing the demand of the market participants (i.e. all its end customers) and allocation of gas volumes off-taken thereby shall take place for the entire area of activities of the given DSO.

Gas Law, Article 4 item 1:

(...) The distribution system operator shall offer in the natural gas off-take location affiliated services that include the technical capacity of the distribution system and the transmission system (exit points) at the connection of both systems.

One-stop shop - DSO





1. At present, a market participant in order to use storage facility services has to:
 - conclude a transmission contract and reserve contracted capacity at exit point and entry point with the TSO;
 - conclude a storage facility contract specifying the injection capacity and the off-take capacity.

2. No certainty that the capacity at the PEX/PEN at the TSO and the capacity at the SFO shall be the same.
3. The TSO suggests that the SFO, who via the connection agreement shall specify the capacity at the PEX and PEN to the storage facilities, ordered capacity at the connection of both systems and made it available within the storage facility service.

Gas Law, Article 5 item 1:

(...) The SFO shall offer affiliated services encompassing the capacity of the storage facility and of the transmission system (entry and exit points) at their connection point.

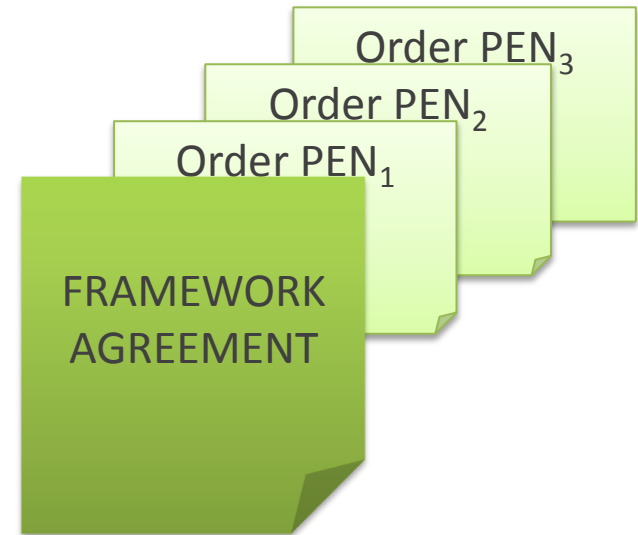
1. All transmission contracts shall have the traits of framework agreements specifying:

- the parties to the contract;
- the admissible scope of obligations.

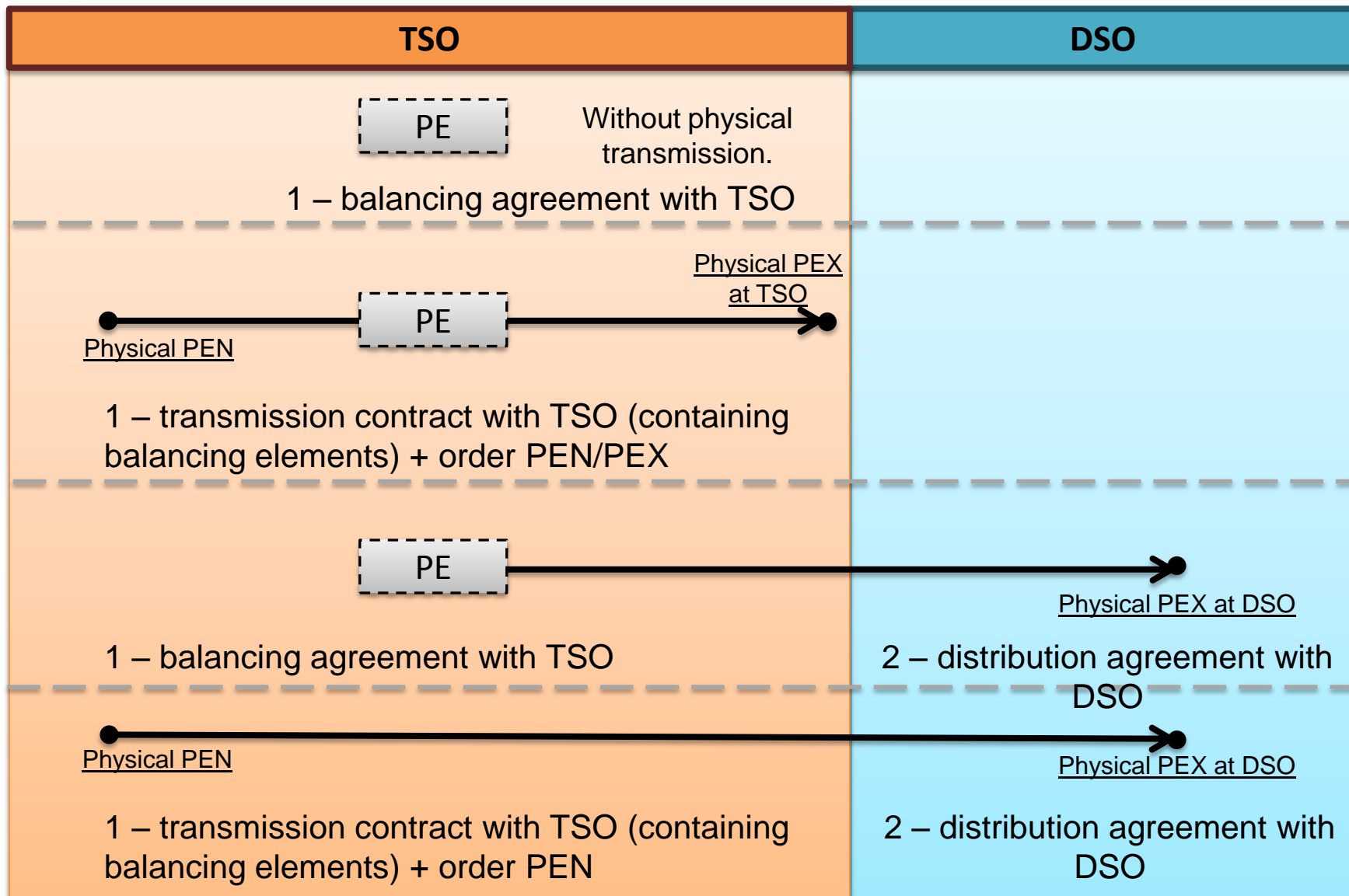
2. With each framework agreement separate orders shall be placed concerning given entry or exit points.

3. Each order shall specify:

- entry/exit points,
- duration of the order for a given point,
- type of capacity – constant/interruptible.



New types of contracts



Regulation (EC) No. 715/2009

ARTICLE 12.

(...) Transmission system operators shall promote operational arrangements in order to ensure the optimum management of the network and shall promote the development of energy exchanges, the coordinated allocation of cross-border capacity through non-discriminatory market-based solutions, paying due attention to the specific merits of implicit **auctions for short-term allocations** and the integration of balancing mechanisms. (...)

ARTICLE 13.

(...) Member States may decide that tariffs may also be determined through market-based arrangements, **such as auctions**, provided that such arrangements and the revenues arising therefrom are approved by the regulatory authority.

Capacity allocation mechanisms in the TNC

I. Allocation at entry points:

1. Open Season - newly built points
2. Auctions – 10% of the capacity
3. Pro-rata – 90% of the capacity



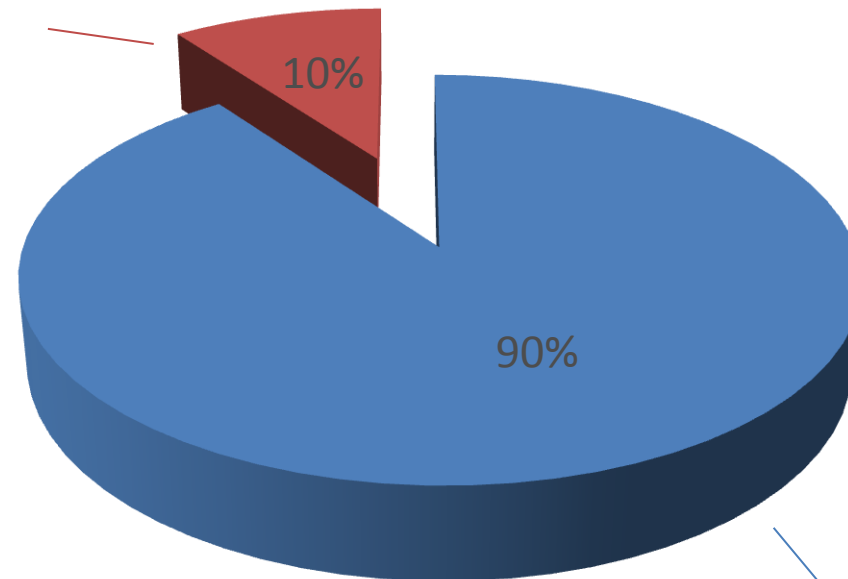
II. Allocation at exit points:

1. First Come First Served
2. Pro-rata – in the event of technical congestion



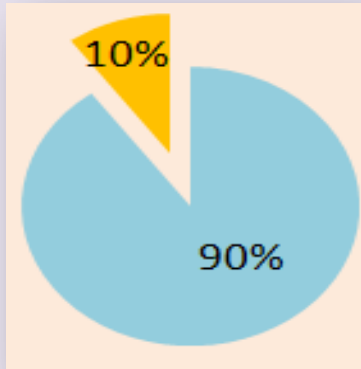
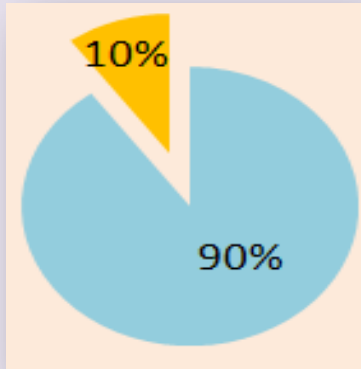
Duration of contracts in TNC

One year contracts -
Auction



**Long-term contracts (max. 4
years) -
Pro-Rata**

Capacity allocation

Contracts	Poland	EU
Short-term	<ol style="list-style-type: none">contracts up to 1 yearannual products, quarterly, monthly (10%)	<ol style="list-style-type: none">contracts up to 1 year,quarterly, monthly products (min.10%)
Long-term	<ol style="list-style-type: none">contracts from 1 year up to 4 years,annual products (90%)	<ol style="list-style-type: none">contracts from 1 year up to 15 years,annual products (max. 90%)
		

1. In order to develop competition in the internal market in gas, large non-household customers should be able to **choose their suppliers** and enter into contracts with several suppliers to secure their gas requirements. **Such customers should be protected against exclusivity clauses, the effect of which is to exclude competing or complementary offers.**
(Directive 2009/73 point 17 of the Preamble)
2. (...) Member States shall ensure that the eligible customer is in fact able easily to switch to a new supplier.
(Directive 2009/73 Article 3 item 3)
3. Member States shall ensure that where a customer, while respecting the contractual conditions, wishes to change supplier, the change is effected by the operator(s) concerned within three weeks;
(Directive 2009/73 Article 3 item 6)

Stages in the change of supplier process:

1. Customer concludes sales agreement with new supplier;
2. Customer gives notice of termination of sales agreement with current supplier;
3. New supplier informs current supplier and TSO or DSO about date of gas sale services provided thereby;
4. Conclusion of gas transmission or distribution contract by new supplier;
5. Termination of transmission or distribution contract with current supplier;
6. TSO or DSO takes measurement system readings in order to perform settlements of the customer with the current supplier.
7. TSO or DSO immediately conveys measurement data to current and new supplier.

Backpack principle

1. The customer connected to the network is the holder of capacity at this point. "The capacity at the point ensues from the customer."
2. This principles was expressed in point 6.12 part I of the TNC and point 16 of the DNC.
3. Conclusion of the gas transmission or distribution contract with a new supplier /customer results in the automatic termination of the contract with the current Shipper (Distribution Service Shipper) at this point.
4. "Should the customer change supplier, the current supplier shall release the capacity of the gas system at the exit point which was used by the given customer. The gas transmission contract or gas distribution contract with the current supplier is terminated in the part concerning the capacity used by the customer changing supplier on the day of termination of the complex agreement." – Draft GL.



In order for the new gas market model to be implemented, the following is necessary:

1. Action on the side of the TSO:

- Preparing the draft TNC containing the proposed solution
- Consultations of the draft TNC with the market participants
- Approval of the draft TNC by the President of the ERC



2. Action on the side of the DSO:

- Preparing the draft TNC containing the proposed solutions.
- Consultations of the draft TNC with the market participants.
- Approval of the draft TNC by the President of the ERO.

3. Action on the side of the Polish Power Exchange:

- Preparing the POLPX rules and regulations and its approval by the PFSA.

Legal changes:

1. Implementation of the Gas Law Act in order to ensure that the TSO has the appropriate instruments for balancing and creation of a new market model;
2. Amendment to the Public Procurement Law Act enabling the purchase of gas per operator, including system balancing without the implementation of PZP procedures analogous to Article 138a;
3. Amendment to the tariff regulations – settlement in energy units;
4. Amendment to the system regulations – introduction of the Virtual Point.

Thank you for your attention.

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