



**TRADING
HUB
EUROPE**
keep in balance

The company and its role

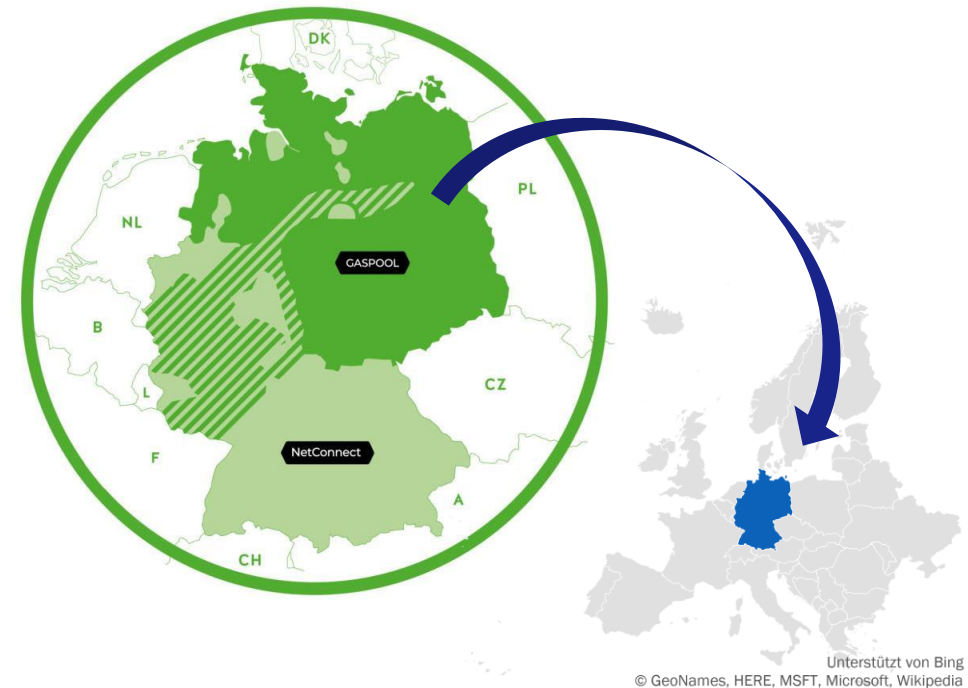


Company overview

THE profile

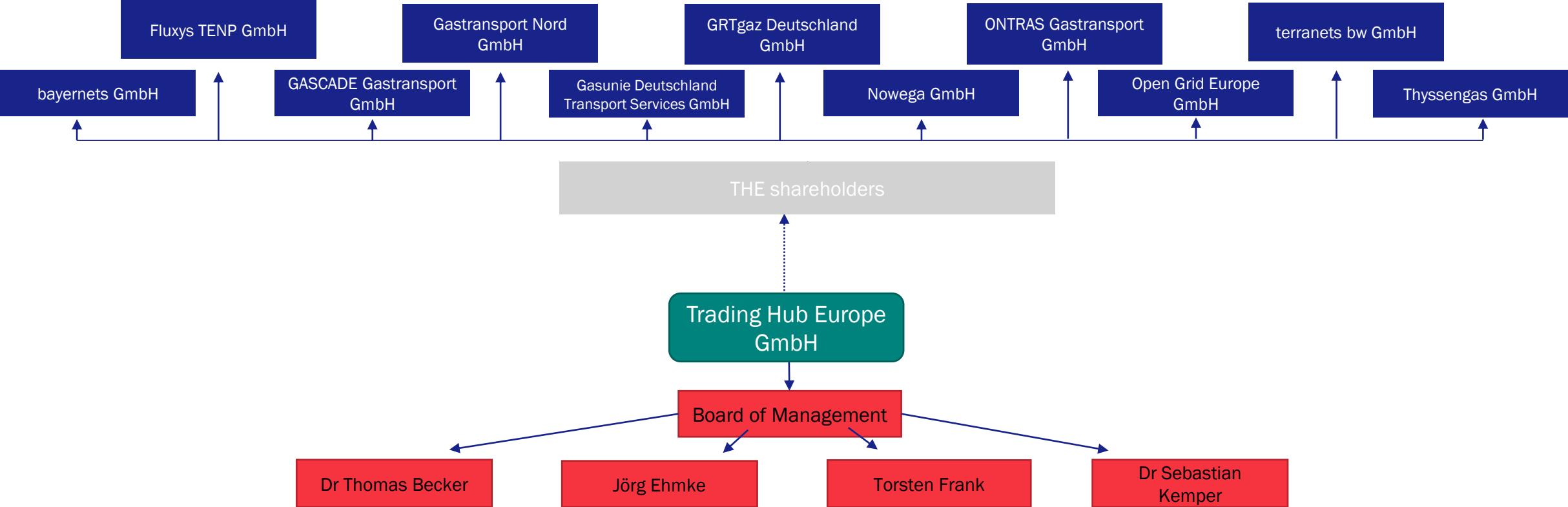
- **Company:** Trading Hub Europe GmbH ("THE")
- **Registered office:** Ratingen (Head Office); Berlin
- **Employees:** approx. 100
- THE is a cooperation between the **eleven largest gas transmission system operators in Germany**. The company is the **sole market area manager** of the German gas transmission networks and is subject to regulation by the Federal Network Agency ("BNetzA")
- THE was formed on 1 June 2021 by way of a merger of the two predecessor companies **GASPOOL and NetConnect Germany** following the amendment of the Gas Network Access Ordinance (GasNZV) in 2017 (cf. section 21 GasNZV)
- On 1 October 2021, the **Germany-wide market area** "Trading Hub Europe" started operations
- A market area **links of hydraulically connected networks and sub-networks** operated by different network operators. It extends from the **import entry points** (or sources within Germany) to the **exit points** serving the assigned end users
- The high-pressure pipeline system in the Germany-wide market area has a **total length of around 40,000 km** connecting **more than 700 downstream distribution networks**

The market area



For more information, go to: https://www.bundesnetzagentur.de/EN/Areas/Energy/Companies/NetworkAccess_Metering/start.html?jsessionid=4C7563FD0F40301C062D4FB1A76C51BB

Trading Hub Europe shareholder structure



Responsibilities and key figures

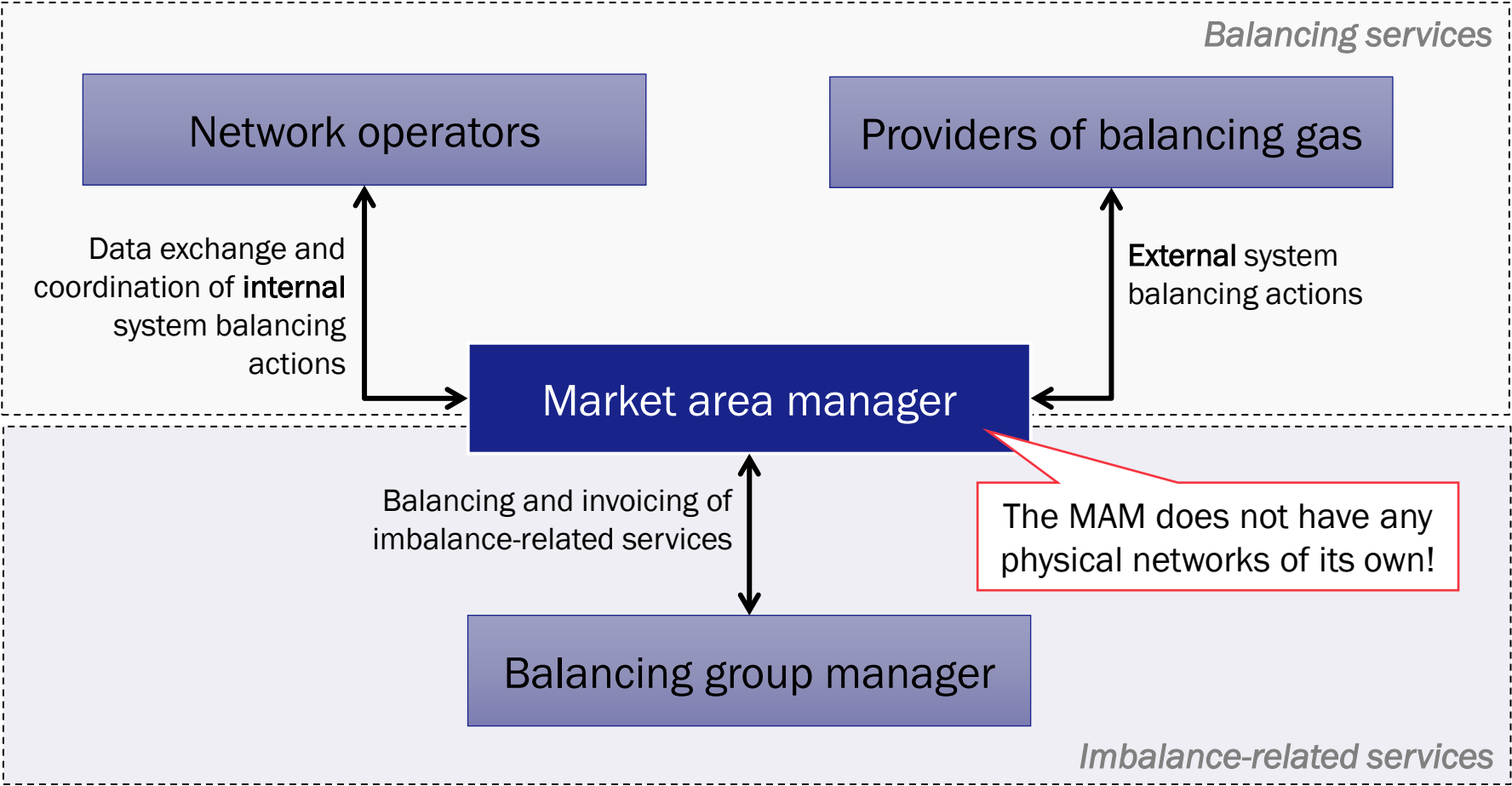
Main responsibilities of the market area manager

- System balancing / use of balancing gas
- Provision and operation of the Virtual Trading Point (VTP)
- Management of balancing groups, balancing sub-groups and network balancing accounts
- Ensuring data exchange between market participants
- Publication of a wide range of information and billing data
- Support and management responsibilities the event of a crisis to foster solidarity between EU member states as provided for in the Security of Supply Regulation
- New responsibility since 2022: action to ensure security of supply

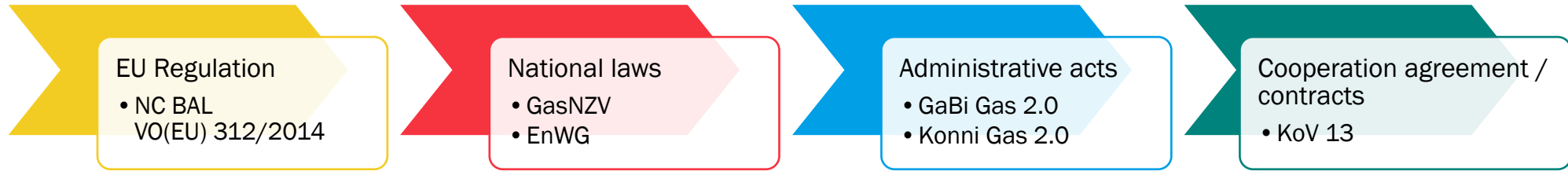
Key figures

- Total length of high-pressure pipeline system in THE's market area: approx. 40,000 km
- Number of downstream networks connected to high-pressure system: more than 700
- Number of national and international balancing group managers: 600
- Data hub for the gas industry in Germany and Europe
- VTP trading volume: 3.9 billion MWh (total German gas consumption: approx. 1 billion MWh)
- VTP trading parties (10/2021): 420 for H-gas, 200 for L-gas

Managerial responsibilities of the MAM



THE's regulated business



Legal framework: EU Regulation, EnWG, GasNZV and administrative acts of the regulatory authority

- According to section 20 of the Gas Network Access Ordinance (GasNZV), transmission system operators have to form market areas, and a market area manager has to be appointed for the market area formed. The appointed market area manager then has to perform the main responsibilities set out in section 20 (1) sentence 3 GasNZV (including balancing group management, system balancing and operation of the VTP).
- Given this regulatory obligation, there is only one market area manager for the whole of Germany, which legally rules out any competition. THE therefore exercises a legally envisaged and legitimised monopoly role.
- The Federal Network Agency (BNetzA) as the competent regulatory authority has adopted administrative acts setting out rights and obligations towards the gas TSOs and THE on the basis of section 29 of the Energy industry Act (EnWG) in conjunction with section 50 (1) no. 9 GasNZV.
- The relevant administrative acts issued by the Federal Network Agency for THE are the GaBi Gas 2.0 and the Konni Gas 2.0 rulings. THE therefore performs regulated tasks.

Principle of cost and revenue neutrality

- THE levies charges in EUR/MWh if, before the start of the one-year charge period (in each case from 1 October to 30 September of the following year), the costs are predicted to exceed the forecast revenues, even with a liquidity buffer taken into account. This is to ensure that the market are manager (MAM) is and remains adequately funded at all times.
- The inclusion of all of THE's costs and revenues related to its system balancing actions in the two balancing neutrality accounts complies with the principles of cost and revenue neutrality as provided for in Article 29 (1) of the Network Code on Gas Balancing of Transmission Networks. This principle has been transposed by the GaBi Gas 2.0 ruling.
- After all, the MAM should not generate any profits or incur any losses from its system balancing actions.
- It is thus ensured by law that the MAM can perform its tasks on behalf of the government at all times.

Central location within Europe

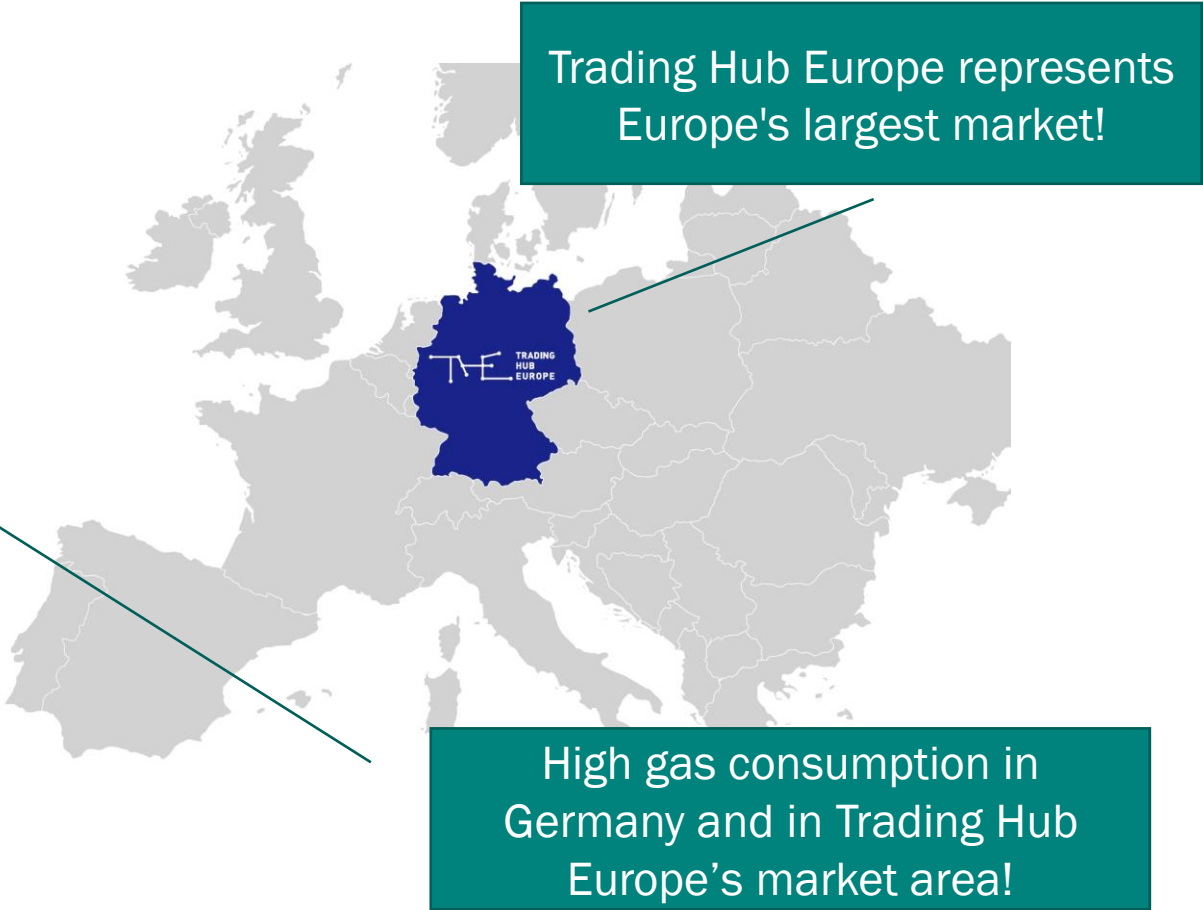
With its central location at the heart of Europe, Trading Hub Europe has the potential to become

- Europe's leading gas trading hub and
- the starting point for a cross-border integration of the European gas markets



National gas consumption in bcm*

Country	bcm in 2019
Germany	88.7
UK	78.8
Italy	70.8
France	43.4
Netherlands	36.8
Spain	36.1
Poland	20.4
Belgium	17.4
Austria	8.9
Norway	4.5



* Source: [bp Statistical Review of World Energy 2020](#)

Overview of market partners

Market area manager (MAM)

- Manages the balancing groups (trader portfolios)
- Operates the virtual trading point (VTP)
- Maintains network stability by buying and selling additional gas (so-called balancing gas)
- Acts as the central hub for data flows between market partners

Network operator

- Determines data at the physical exit and entry points of the gas network by means of metering or calculation methods
- Supplies metering data and consumption forecasts for residential and small commercial users

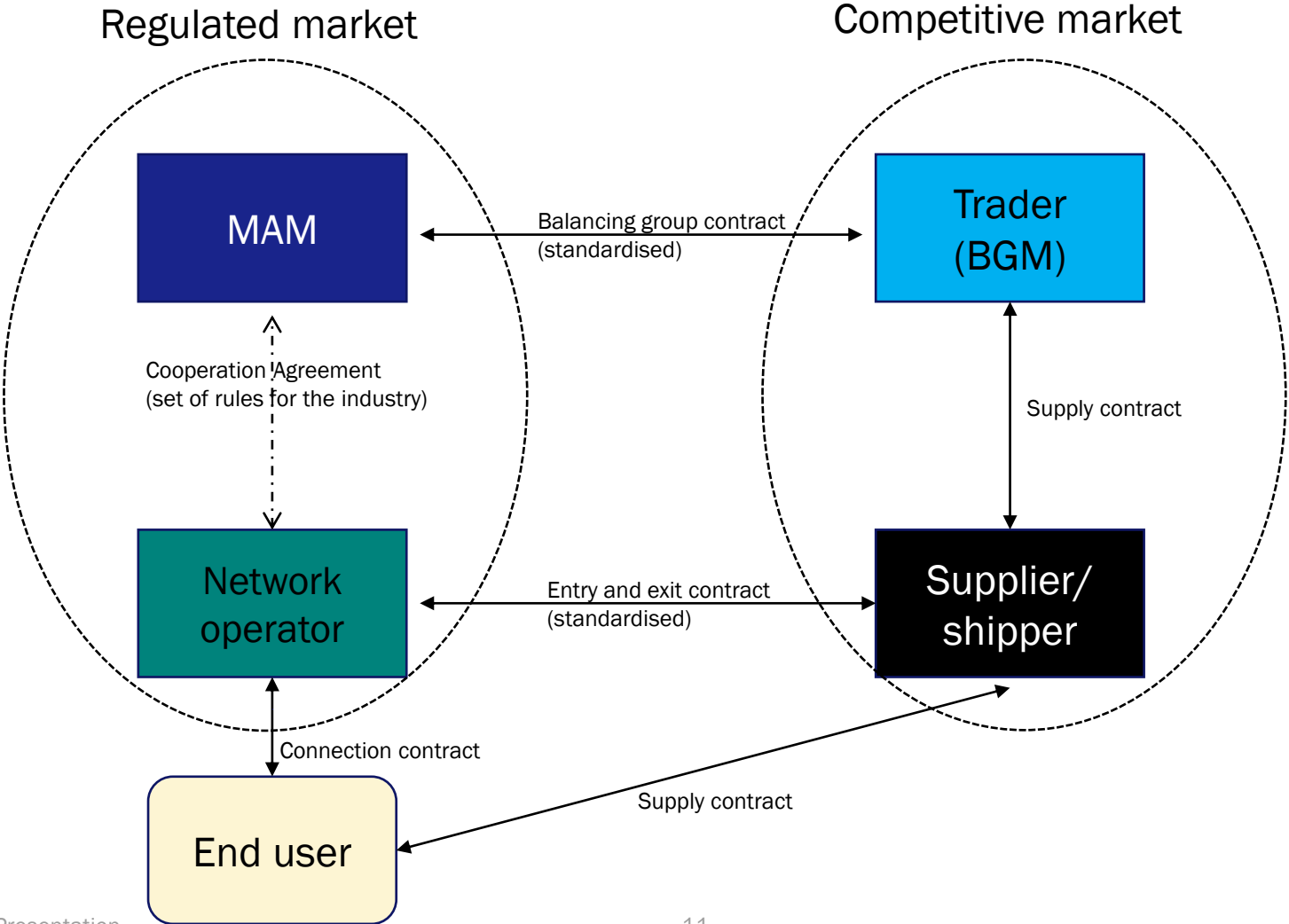
Trader (balancing group manager, BGM)

- Manages a portfolio (balancing group) for one or more suppliers (shippers)
- Provides a forecast for large consumers
- Ensures financial compensation for differences arising in the balancing group (including daily imbalance quantities and other fees)

Supplier (shipper)

- Uses pipeline networks to ship the gas
- Concludes entry and exit contracts

Contractual relationships between market partners



MAM = Market area manager
BGM = Balancing group manager

THE's main responsibilities



System balancing

- The MAM has overall responsibility for physically balancing all networks in its market area (by using so-called balancing gas)
- Balancing gas is essentially created by...
 - ... deviations from predicted domestic/industrial consumption levels
 - ... deviations in the quality of gas fed into the network and used (conversion)
- The first action taken is the use/exchange of gas quantities in the gas TSOs' networks (known as "internal system balancing"; free of charge for THE).
- If this is not sufficient, the system is physically balanced through the purchase/sale of additional gas quantities (known as "external system balancing")
- Balancing gas is procured in accordance with the GaBi Gas 2.0 ruling according to a defined merit order list (MOL) preferably on the exchange
- Only if the quantities available on the exchange are insufficient or there are specific network-related requirements can pre-contracted long-term products (so-called LTOs) and/or flexibility services be used

Balancing group management

- Balancing group contracts provide the basis for the supply of gas to end users or trading in the market area, in other words without a valid balancing group contract, companies cannot operate (nor ship gas) in the THE market area.
- The entire (virtual) transportation of gas quantities is handled via balancing groups
- Consumptions or consumption forecasts are recorded in the balancing group, e.g.
 - purchases/sales at the VTP
 - metered consumption by large customers/power plants (known as RLM customers)
 - consumption forecasts by network operators (for residential customers and small businesses, known as SLP customers)
 - Injection/extraction at cross-border interconnection points/storage facilities
- Imbalances between entry and exit quantities are monetised at the end of the gas day (daily imbalance quantity) and invoiced on a monthly basis

Operation of the virtual trading point (VTP)

- The actual gas trade takes place at the VTP
- The VTP is a fictitious delivery point which serves as a transfer point for the settlement of gas deliveries within a market area.
- The VTP is not assigned to a physical entry or exit point and enables buyers and sellers of gas to buy or sell natural gas even without booking capacity (virtual transfer of quantities between balancing groups)
- Shippers who have booked entry capacity into the market area can use it to bring gas to the VTP, while shippers who have booked exit capacity can use it to ship gas away from the VTP
- Transactions concluded on the exchange are also executed at the VTP (by the exchange)
- The prerequisite for using the VTP is a valid balancing group contract
- The MAM invoices a cost-neutral usage fee

System of neutrality charges ensures cost neutrality

SLP account

RLM account

Konni account



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↔ Proportionate distribution according to model specifications

- ➔ Negative reconciliation quantities
- ➔ Positive reconciliation quantities
- ➔ Settlement of network balancing account
- ➔ SLP charge ^{*)}

- ➔ Imbalance quantities
- ➔ Within-day flexibility charge
- ➔ Invoicing of quantity differences
- ➔ RLM charge ^{*)}

- ➔ Capacity costs
- ➔ Technical installations of third parties
- ➔ Conversion fee
- ➔ Conversion neutrality charge ^{*)}

^{*)} Levied only after 10/2022

Support in case of solidarity (SOS ordinance)

- Objective: solidarity between EU member states to protect their most vulnerable customer groups from the effects of extreme gas shortages in the event of a crisis
- In the context of European crisis preparedness ((EU) Regulation 2017/1938, so-called SoS Regulation), Germany has already concluded bilateral solidarity agreements (Denmark, Austria). Further agreements with neighbouring EU member states are under negotiation.
- In Germany, the solidarity mechanisms have to be incorporated into the national crisis management system as provided for in the Energy Security Act (*EnSiG*) and the Gas Security Ordinance (*GasSV*).
- In the event that Germany requests solidarity from a neighbouring country, THE will procure the quantities in these countries on behalf of the federal government and/or assists in shipping these quantities to Germany.
- If Germany is called upon by a neighbouring country to show solidarity, there is a gas security platform (*SiPla*) developed by the Federal Ministry for Economic Affairs and Climate Action (*BMWK*), the Federal Network Agency (*BNetzA*) as the federal load dispatcher and THE as the market area manager for posting and calling off market-based offers and for dealing with government obligations in a solidarity situation.
- The platform can also also be used in a national gas shortage situation (Energy Security Act (*EnSiG*)).

Areas of application of the gas security platform

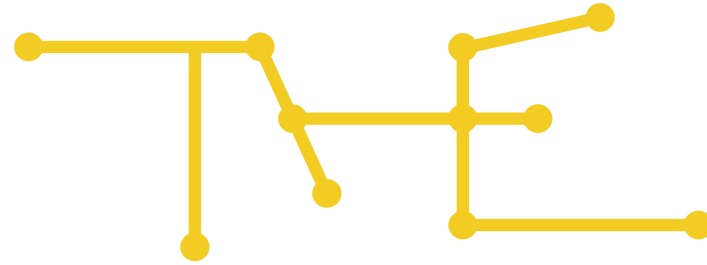
- Areas of application of the online platform:
 - **Scenario 1:** Procurement of gas quantities in a national gas shortage situation (EnSiG)
 - **Scenario 2:** Procurement of gas quantities on the basis of market-based offers at the request of EU member states (connected with Germany) (SOS Regulation).
 - **Scenario 3:** Non-market-based procurement of gas quantities upon request from EU member state (connected with Germany) (SOS Regulation).
- The purpose of the online platform is to post market-based offers and handle government obligations in a solidarity or crisis situation
 - Quick and effective identification and procurement of gas quantities in a national gas shortage situation with the least possible impact (Scenario 1).
 - A staged approach requires EU member states to first exhaust all market-based and other options provided for in the Emergency Plan (Scenario 2); only then can member states connected via pipelines request non-market-based solidarity offers (Scenario 3).
- The online platform is operated by THE.

Security of supply (I/II)

- **Minimum gas storage levels:**
- Amendment of the Energy Industry Act (*EnWG*) through the introduction of minimum storage levels (Federal Law Gazette (*BGBl.*) 2022 I No. 14, p. 674), entry into force of the Act on 30 April 2022
 - Minimum storage levels: 85% on 1 October | 95% on 1 November | 40% on 1 February
- Accordingly, THE has to procure options for the storage of gas (SSBO) in public tender procedures in order to ensure the minimum storage levels or, if this is not sufficient, to procure its own quantities for injection into storage
- The costs incurred by THE in connection with these tasks are passed on to the balancing group managers in the market area as part of a non-discriminatory and transparent procedure ("Gas Storage Charge")

Security of supply (II/II)

- **Netted price adjustment:**
- Amendment of the Energy Security Act (*EnSiG*) by way of a regulation on netted price adjustments through the Gas Price Adjustment Ordinance (*GasPrAnpV*) pursuant to section 26 of *EnSiG* (Federal Law Gazette (*BGBl.*) 2022. I p. 1054), entry into force of the regulation on 9 August 2022.
- Importers of gas from Russia are entitled to financial compensation from THE for part of the additional costs incurred in connection with the replacement purchases.
- The costs incurred by THE in connection with these tasks are passed on to the balancing group managers in the market area who procure quantities for end users. This is done as part of a non-discriminatory and transparent procedure ("Gas Procurement Charge")



TRADING HUB EUROPE

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