



Opportunities within the new LNG and Gas Storage and Heating and Cooling strategy





Gas Transmission Operator GAZ-SYSTEM S.A.

Hearing on Winter Energy Package Brussels, 29 June 2016



the system that connects

GAZ-SYSTEM IN NUMBERS*:

10.996 km LENGHT OF TRANSMISSION NETWORK

881 GAS STATIONS

65 SYSTEM POINTS

14 COMPRESSOR STATIONS

100% SHARES HELD BY STATE TREASURY

* Infrastructure data as of 31 December 2015

KEY FACTS:

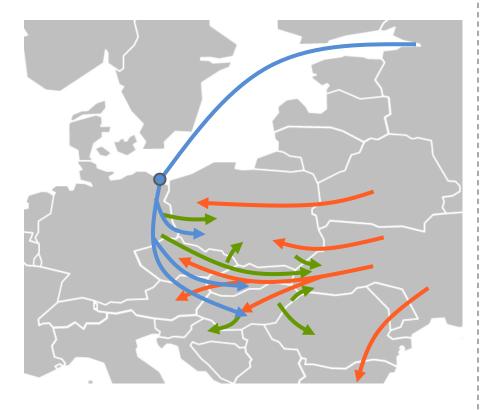
- Natural gas TSOs in Poland established in April 2004
- Fully unbundled company providing services on nondiscriminatory basis
- Certified operator of the transmission system and of the Yamal-Europe pipeline in Poland
- Operator of a virtual point in the transmission system in Poland (VTP)
- Major TSO in the CEE region with a number of successfully completed investments
- Key integrator and facilitator of market development in CEE and in the Baltics
- Company committed to the liberalisation of the regional gas market

THE STRATEGY:

- Security of supply. Ensuring safe operations of the transmission system as part of the European gas network
- Market development. Creating optimum conditions for the development of a liberalised market in Poland
- European partner. Strengthening the position of GAZ-SYSTEM as an integrator of the gas markets in the Baltic & CEE regions
- Sustainability. Development of gas infrastructure to enable increased consumption of natural gas as an environmentally-friendly fuel

The pillars of the GAZ-SYSTEM strategy also underpin the objectives of the Energy Union (energy security, integration, emissions reduction and innovation)





SITUATION BEFORE 2009:

- Transit oriented infrastructure (East-West running pipelines)
- High exposure to supply disruptions
- High dependency on gas supplies from Russia
- Fragmentation limited attractiveness for upstream players and traders

IMPROVEMENTS MADE AFTER 2009:

- New investments commissioned reverse flows, new cross-border interconnections
- ► The first step made towards integration of the region
- In parallel, the liberalisation of the gas markets in the CEE region kick started

POSSIBLE FUTURE SCENARIOS:

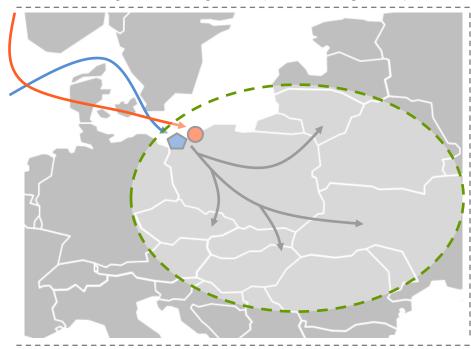
- New, substantial projects to increase import capacities from the existing, dominant supplier
- The impact on diversification of gas supply, market liberalisation and infrastructure integration in CEE



NEW SUPPLY CORRIDORS IN CENTRAL-EASTERN EUROPE

ASSUMPTIONS BEHIND NEW SUPPLY CORRIDORS:

- Three different sources of supply
- ▶ Flexible and well-developed natural gas infrastructure
- ► Entry-exit zone in the region with competitive tariffs
- Increasing volumes of gas transported through the system



LNG TERMINAL IN ŚWINOUJŚCIE:

- Regasification capacity: 5 bcm/y in the first stage, up to 10 bcm/y following the planned extension
- ► **Timeline:** construction works completed, start-up phase underway, commercial operations as of July 2016
- Project role: the first physical source of supply diversification in CEE, a gate to the global LNG market

BALTIC PIPE:

- Capacity: up to 10 bcm/y
- ▶ **Timeline:** project at the pre-investment stage (feasibility study ongoing), commissioning in 2022
- Project role: direct access to Norwegian supplies for the CEE region, positive influence on competition between suppliers and security of supply

CONCLUSIONS:

- Complementary role of LNG terminal in Świnoujście and Baltic Pipe in terms of security of supply, diversification and competition
- ▶ Both projects will significantly increase diversification of supply directly in Central and Eastern Europe
- ▶ Key role of cross-border interconnections linking Poland and adjacent systems (Ukraine, Czech Republic and Slovakia)
- This potential should be utilised on a regional level to integrate networks, diversify supplies, enhance competition and improve attractiveness of the regional market towards upstream players



LNG TERMINAL IN ŚWINOUJŚCIE

Regasification Capacity

5,0 bcm/y (570 000 cm/h) – the 1st stage **Up to 10** bcm/y (856 000 cm/h) – possible extension

LNG Offloading

Facility designated to receive Carriers from 120,000 to 216,000 cm (Q-flex vessels)

Carriers characteristics, draught: 12.5 m, length: 315 m

Storage

Two storage tanks with capacity of 160,000 cm each. Possibility for construction of third additional storage tank (space reserved)

Capacity booking

Booked: 370 000 cm/h Available: 200 000 cm/h

Full TPA provided to interested customers

Timetable

Construction works: completed in Oct 2015

Start-up: Q4 2015 - Q2 2016

Technical Start-up phase concluded with success (Two cargos received, deliveries injected to the network,

installation cooled)

Commercial operations: Jun 2016 (first commercial cargo received on 17/06/16, spot cargo on 25/06/16)







LNG TERMINAL IN ŚWINOUJŚCIE – 1ST SPOT DELIVERY (25 June 2016)











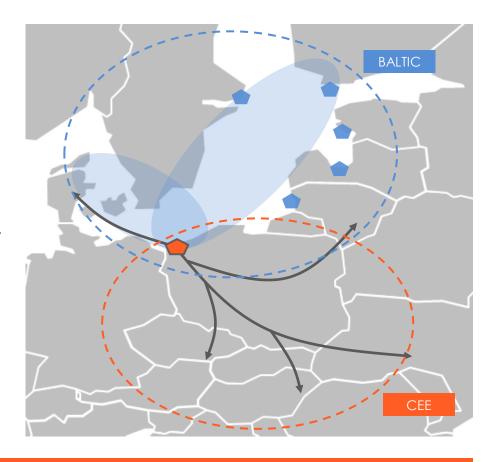
REGIONAL ROLE OF LNG TERMINAL IN ŚWINOUJŚCIE

CREATING NEW SUPPLY OPPORTUNITIES FOR THE REGION

- ▶ **BALTIC** LNG regasified and transferred to the gas transmission system in Poland and the Baltic region (in the future also via small-scale)
- CEE LNG supplies provided to the CEE region and Ukraine via the N-S Gas Corridor

LNG AS A NEW, ALTERNATIVE FUEL

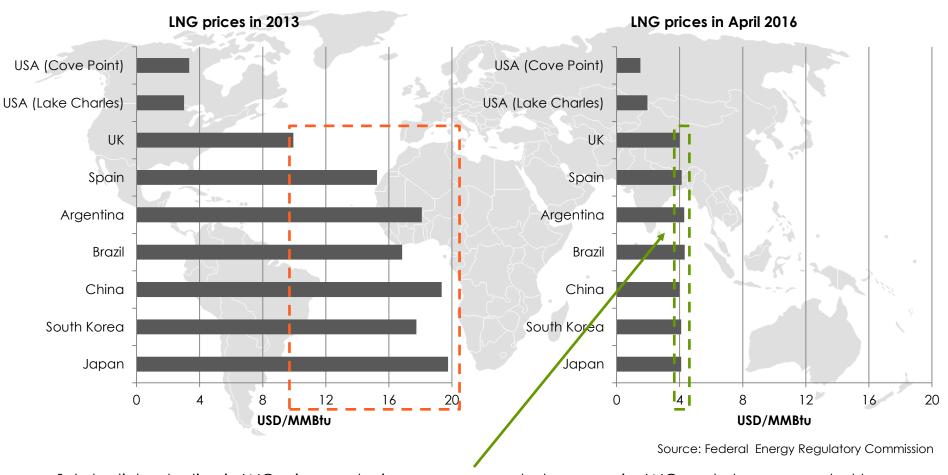
- New, additional services will be provided to the system users in the region, fostering the deployment of LNG as the reliable, competitive and sustainable fuel:
 - LNG truck loading services
 - LNG bunkering services
 - LNG reloading to smaller vessels
 - LNG storage services
 - LNG in transport sector



LNG Terminal in Świnoujście as the key component of the strategy for diversification of gas supplies in the CEE and Baltic regions



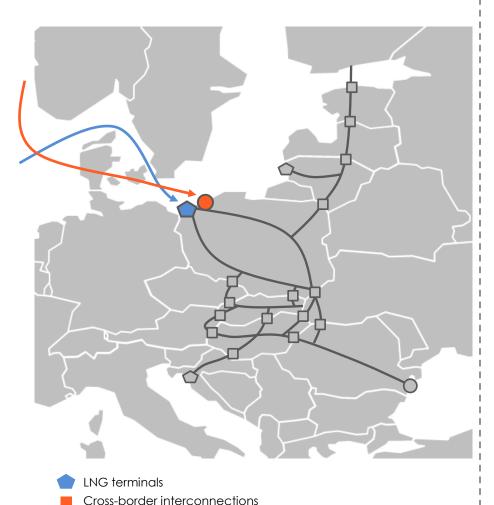
LNG PRICES ON THE GLOBAL MARKETS



- Substantial reduction in LNG prices and price convergence between major LNG markets are expected to translate into more LNG cargoes arriving in European LNG terminals
- ▶ This creates supply and price potential for the CEE region with the benefit for diversification and gas-to-gas competition



PROVIDING LNG POSSIBILITIES TO THE CEE REGION



INFRASTRUCTURE

- Infrastructure as the cornerstone of SoS and an integrated regional gas market that is attractive to new supply sources such as LNG
- Crucial need to implement all necessary projects in the region to provide access to a diversified supply portfolio
- Adequate infrastructure will pave the way for gas in Heating and Cooling
 - Gas as important fuel for H&C in the CEE region (weather conditions, existing installations, flexibility and high efficiency)
 - Sustainable fuel in H&C as it lowers emissions and pollution
 - Cost-effective

LNG

- Crucial element of the SoS strategy
- Opening up the global and liquid market to the CEE region
- Fostering competition between gas suppliers and increasing the competitiveness of gas as a fuel in the energy mix

REGULATION

- Implementation of market based solutions to foster liberalisation (NCs, cooperation)
- Stable regulatory framework key for the deployment of natural gas, including LNG as competitive and sustainable fuel (also in H&C)



National production

CONCLUSIONS

GAZ-SYSTEM welcomes the Winter Package

- ► GAZ-SYSTEM remains committed in enhancing security of supply, diversification and competition on the natural gas market, that should be constantly supported on the EU level
- ► The Company have already implemented important projects (LNG Terminal) and plans to provide further physical diversification to the CEE region (the Northern Corridor – LNG, NO gas)

▶ LNG will bring many positive developments to the CEE region

- Solving the persistent SoS problems in the region
- Opening up the global, liquid and competitive market, thus providing real gas-to-gas competition
- Providing the basis for alternative usage of LNG (small-scale, transport sector, distribution)

Need for comprehensive approach

- ► Hardware infrastructure developments bringing new supplies and bridging gaps on regional markets
- Software implementing necessary solutions to facilitate cross-border flows and trading (network codes)
- Consistent long-term regulatory vision providing stability to market participants and TSOs on the future role of gas. Necessary factor for investment decisions and implementing new innovative and sustainable solutions based on natural gas.





Thank you for your attention









the system that connects