

# Digital Transformation Effect on the Economics of the Gas Market

**Roundtable input by Austria**

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# Digitalization Level

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- Steering questions
  - No digitalization targets set by the government
  - No indicators or cost & efficiency gains
  - No smart meters
- 3 topics related to digitalization
  - Cyber security for critical infrastructure
  - Hourly data on gas quality
  - Hourly data for balancing

# Cyber Security for Critical Infrastructure

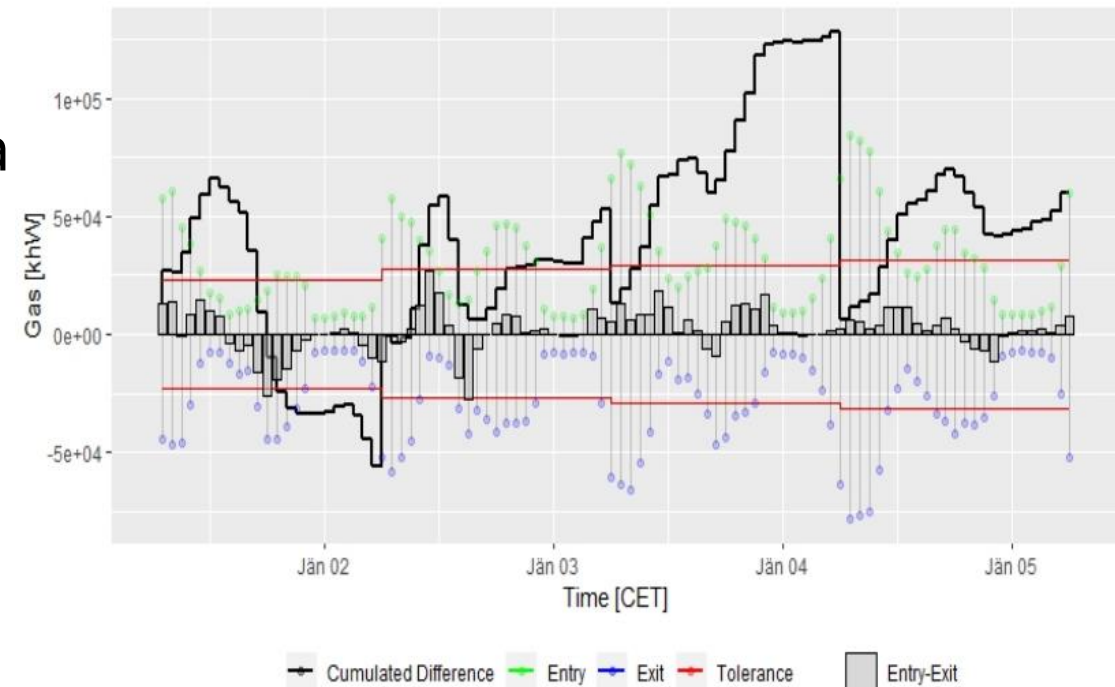
- Austrian Network and Information Security Law (NIS)
  - National implementation of the NIS Directive (2016) in 2018
- Network operators must implement the requirements of the NIS.
- Adapting systems and subsequently carrying out necessary ongoing maintenance and inspection work for these new systems.
- Protection against cyber attacks on the grid operators' operational facilities and systems (e.g. metering stations, gas compressor stations).
- Create conditions for high level of security for the grid and information systems of the grid operators.

# Gas Quality and Calorific Values

- New system of calorific values in Austria.
- From yearly calculated calorific values for the whole market area to monthly actual calorific values in each calorific value district.
- Background: Varying gas quality (more renewable gas, less Russian gas, more LNG).
- Benefit for customers: Reflects technical reality and more realistic billing with actual calorific values.
- Requirement: Continuous measurement of gas quality by the network operator and collecting of hourly data.

# Balancing - Intraday Incentive System

- The Austrian balancing model implements a within-day incentive system that incentivises the hourly balance per balancing group within the gas day with a tolerance range of 4%.
- The sum of the hourly overrun quantities per balance group outside the tolerance range are priced with a specific cost contribution from the difference between volume-weighted average prices for physical balancing energy purchases and sales on the gas day (only charged if AGGM has bought and sold physical balancing energy in a market area on a gas day).



Source: AGCS



**THANK YOU  
FOR YOUR ATTENTION!**

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