ACER Market Monitoring Report: Gas Wholesale monitoring indicators & findings

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Agenda

1. Introduction to the ACER MMR
   a) Legal Basis, scope, calendar
   b) Contents, indicators and methodology
2. In Practice
   a) Data Collection and Data Processing
3. Results
   a) Key Results of the MMR 2015 gas wholesale volume
   b) Lessons to Learn
4. Questions & answers
Agenda

1 Introduction to the ACER MMR
   a) Legal Basis, scope, calendar
Article 11 of the ACER regulation tasks the Agency to monitor electricity and gas sectors

Monitoring and reporting on the electricity and natural gas sectors

1. The Agency, in close cooperation with the Commission, the Member States and the relevant national authorities including the national regulatory authorities and without prejudice to the competences of competition authorities, shall monitor the internal markets in electricity and natural gas, in particular the retail prices of electricity and natural gas, access to the network including access of electricity produced from renewable energy sources, and compliance with the consumer rights laid down in Directive 2009/72/EC and Directive 2009/73/EC.

2. The Agency shall make public an annual report on the results of the monitoring provided for in paragraph 1. In that report, it shall identify any barriers to the completion of the internal markets in electricity and natural gas.

3. When making public its annual report, the Agency may submit to the European Parliament and to the Commission an opinion on the measures that could be taken to remove the barriers referred to in paragraph 2.
Governance of the fifth 2015 Market monitoring Report

Selection of Deliverables

**Overarching volume**
- Summary/recommendations document

**Technical volumes**
- Wholesale electricity
- Wholesale gas
- Retail markets
- Consumer protection

TF / WS
- MMR TF
- ENM TF
- GTM TF
- MMR TF
- MMR WS

WG
- AIMP
- EWG
- AGWG
- AIMP WG

BoR
- All NRAs
Scope of monitoring: some principles

• Legally embedded
• Consistency between gas and electricity analyses
• Coherence over time
• No overlap with other EC studies
• Factual basis - technical report
• Indicators that endure test of time
• Recommendations to improve market design based on factual analyses
Calendar of the 2015 GW volume and NRA interaction

- February: ACER proposes the index of contents and describes the scope of the analyses.
  - Early March: Feedback from NRAs

- Mid May: ACER shares with NRAs
  - Methodological notes for selected indicators
  - First insights and preliminary results in power point

- Mid June: ACER shares with NRAs first word draft
  - NRAs provide feedback

- Mid July: ACER shares with NRAs advanced draft
  - NRAs provide feedback

- Mid July – Mid Aug: written procedure for AGWG

- Beginning September: Final version for information on the agenda for the AGWG

- Beginning September: Document to be submitted to BOR for information

- Mid September: Publication

Multiple moments of interaction with NRA to ensure buy-in
Agenda

1 Introduction to the MMR GW volume
   b) Contents, indicators, methodology
# Table of contents of the MMR 2015 gas wholesale volume

1. Introduction

2. Gas wholesale market developments
   2.1 Recent EU policy environment
   2.2 Supply developments
   2.3 Demand developments
   2.4 Price developments
   2.5 Trends in Ukraine and Russia affecting EU markets

3. Upstream and infrastructure aspects of wholesale markets
   3.1 Diversity in gas import sources
   3.2 Physical flows across borders
   3.3 Market concentration of upstream gas companies
   3.4 Utilisation analysis of underground gas storage

4. Status of EU gas hubs functioning
   4.1 Gas volumes traded
   4.2 Gas target model market participants’ needs metrics
   4.3 Comparison of NBP/TTF with market features of US HH
   4.4 Assessment of supplier’s sourcing cost
   4.5 Gas hub price metrics

5. Impact of network codes on market functioning
   5.1 Degree of NCs implementation and market effects
   5.2 Assessment of potential welfare gains

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**MMR 2015 expanded into two new key areas:**

1: ACER Gas Target Model indicators

2: Network Codes market effects indicators

REMIT data used for monitoring purposes for first time
Indicators serve to monitor EU MSs gas markets status, to infer benefits of improved market integration and also to substantiate policy recommendations.

1. Markets status
   - MSs sourcing cost level assessment
   - AGTM metrics on hubs well-functionality
   - AGTM market metrics on market concentration
   - Cross-border IPs tariff level
   - ..... 

2. Benefits of market integration
   - Losses of social welfare due to lack of capacity optimization
   - Hub price spreads vs transmission tariffs
   - ........

3. Improving the functioning of the internal market
   - NCs implementation effects: e.g. relationship between IPs capacity booking and gas flows
   - Relationship between MSs sourcing cost levels and hubs well-functionality
   - .....
Developments

- EU gas supply portfolio by origin
- International gas consumption, production and key trade movements
- Evolution of EU gas import volumes and oil price
- EU gas gross inland consumption
- Evolution of international wholesale gas prices
- Estimated monthly Ukrainian gas import prices

Upstream and Infrastructure aspects of wholesale markets

- Estimated number and diversity of supply sources in terms of the geographical origin of the gas
- EU cross-border gas flows
- Estimated HHI index per EU MS at upstream sourcing companies’ level
- Daily storage inventories and storage capacity for gas storage
- NBP and TTF forecasted and actual summer/winter spreads
- Daily storage injections and withdrawals for all EU storage
### State of EU gas hubs functioning

- Traded volumes at EU hubs and CAGR
- Median bid and ask-side volumes in the order book
- Order book horizon in ranges of months
- Bid-offer spread measure of the average delta between the lowest ask price and the highest bid-price expressed as a percentage of the highest bid-price across the day
- Number of executed trades (daily average)
- Market concentration ranges of finalised transactions of products for selected EU hubs
- Oil and gas hubs price evolution in Europe
- EU MSs assessed gas suppliers’ sourcing prices
- Levels of DA price convergence between TTF and selected hubs year on year
- Day-ahead price convergence levels in EU hubs compared to transmission tariffs
- Levels of DA price correlation between TTF and selected hubs
- Day-ahead gas prices and price volatility evolution in selected EU hubs
- Price volatility correlation between selected pairs of hubs

### Impact of Network codes on Market Functioning

- Evolution of ratios of booked over technical capacity
- Evolution of ratios of physical flows over technical capacity
- Yearly average used versus booked capacity at selected IPs in the EU
- Marketable and allocated bundled capacity for European cross-border IPs via dedicated auctioning platforms
- Aggregated capacity utilisation of EU IPs - flows over bookings
- Benchmark of average gas cross-border transportation tariffs
- Gross welfare losses per average household consumer in gas wholesale markets
Agenda

2. In Practice a) Data Collection and processing
# Data sources for the monitoring indicators

<table>
<thead>
<tr>
<th>Type of source</th>
<th>Source</th>
<th>Indicators</th>
<th>Available through</th>
<th>Format</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal</strong></td>
<td>REMIT</td>
<td>- Hub well-functionality AGTM metrics: order book volumes, Bid-ask spreads, number of trades, trades concentration</td>
<td>ARIS - REMIT - SQL</td>
<td>XLS</td>
</tr>
</tbody>
</table>
| **Public**    | Eurostat | - Gas demand  
                - Gas border import prices  
                - MSs supply portfolio (1) | Website | XLS    |
|               | Eurostat Comext | - NCs implementation degree  
                            - Capacity booking and utilization  
                            - Physical flows  
                            - Gas IPs tariffs  
                            - Auctioned capacity | Website | XLS    |
|               | ENTSOG / TSOs PRISMA | - NCs implementation degree  
                            - Capacity booking and utilization  
                            - Physical flows  
                            - Gas IPs tariffs  
                            - Auctioned capacity | Website | XLS    |
|               | IEA | - Cross-border flows | Website | XLS    |
|               | BP Statistical report | - Supply portfolio (2) | Website | XLS    |
|               | GIE | - Storage utilization | Website | XLS    |
|               | Exchange operators | - Hub prices | Website | XLS    |
| **Private**   | Platts | - Hub prices | EMOS (EC) | XLS    |
|               | Trayport | - Hub traded volumes | Trayport | XLS    |
|               | ICIS Heren / Propex | - Market intelligence reports – pieces of news | ICIS / Prospex | PDF    |
IT requirements for Market Monitoring
IT requirements for Market Monitoring: data processing

At present

- Ms Office-based indicators:
  - Spreadsheets
  - Basic database
- REMIT indicators
  - Requires programming queries
  - More severe security aspects

Expected evolution

- More refined and robust database
- Statistical packages
Agenda

3. Results
   a) Key Results and Conclusions Drawn
We shall present slides that will be presented at the ACER MMR 2015 wholesale markets workshop celebrated the 21\textsuperscript{st} of September in Ljubljana
Thank you for your kind attention

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