Madrid Forum 2008
6-7 November

Progress and challenges with respect to regional/European market integration

EFET Gas Committee
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Vice Chairman
Joint letter of industry associations to support amendments for facilitating multi-system operation by TSOs

- EFET, Eurelectric, GEODE and Eurogas issue a joint letter supporting respective amendments of parliament’s first reading to foster regional market integration

- Requires IA, harmonisation of network access rules at regional level, multi system capacity platforms, marked based balancing, regional balancing and coordinated regional investment planning.
- Could lead to regional entry/exit models within (4-5 years) and a joint regional network operation in appropriate areas
- Understanding that this will work only effectively with improved regulations and stricter oversight and enforcement
- European single market model goal, timetable as concluded by Madrid Forum

- Letter print out available, will be sent out with documents
What market players need

- **Predictability of regulatory framework:**
  - 3rd package most important and clear harmonised guidance on implementation
  - Integration towards a single European gas market clear goal?!
  - System investments (capacity optimisation) necessary with a European view
  - Regional approach necessary for pragmatic and technical reasons
  - EC to ensure consistency and progress over/within all regional initiatives

- **Transparency**
  - Access to the system (capacity existing and new, tariffs, market rules, licensing)
  - Published market based prices (balancing, spot, forwards) per area
  - Data for the past, the present and the future as available

- **Access to the system**
  - Capacity available where necessary
  - No cross border incompatibility
  - No intransparent balance rules but market based and market should reflect system stress
  - System should be as large as possible (several TSOs) and not one pipeline only
    - Current legislation does not prevent the emergence of 1 pipeline TSOs
    - Current system enhancement process de facto a mess as often 1 pipe only – no consistent guarantee of access even for paying shippers, de facto establishment of point-to-point tariffs
Then market players could

- Have confidence in stable and positive development and hence derive business cases
  - Investments into energy business activities have long lead time (trading floor, affiliates, or even power plants, pipelines and LNG terminals,..)

- With confidence more market players will arrive on the scene
  - E.g. Horizontal diversification (oil, gas, electricity) and/or vertical (going downstream or e.g. large customers getting more upstream)

- Establish liquid traded markets with a sufficiently large physical market underneath the Hub/exchange:
  - NBP, a North West Continental one (PEG or Zeebrugge, TTF) or EEX (EGT+Bayernet), Italian gas exchange (PSV new, maybe market operator), CEGH if regional, Iberian,..????
Market pricing in EU

- It could all be so easy!

However:
- The question of liquidity is still dominant

<table>
<thead>
<tr>
<th>Countersparts (EUR/OMT change)</th>
<th>NBP</th>
<th>TTF</th>
<th>EGT</th>
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<tr>
<td>Counterparts</td>
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<td>65</td>
<td>45</td>
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<tr>
<td>Change Rate</td>
<td>15-10</td>
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</tbody>
</table>

Stephan Ressl

Madrid Forum, 6-7 November 2008
Market pricing in EU – arbitrage 1

Apparent lack of arbitrage activity
- No interest?
- Too complicated?
- No capacity easily available?
- Interoperability issues?

Prices:
13 March 2006 in EUR/MWh

96,31 95,92 55,00 26,80 57,25 21,20 42,00
Market pricing in EU - arbitrage 2

Apparent lack of arbitrage activity if differential larger than net transport cost (= netted real physical transport)

Prices: Summer 2006 in EUR/MWh
Market pricing in EU

- Current Hubs/Exchanges in the EU
  - In some parts many
  - In other parts none

- CEE is rather illiquid for the time being
Multi-TSO integration potential 1

JV (NetConnect) of EGT and Bayernet is a good new example for a start.

Forward curve for region 1-6
Spot market for region 1-6
Intra-day market for region 1-6
Multi - TSO integration potential 2

JV of EGT and Bayernet [NAME] is a good new example for a start

**Formerly:**
- Firm capacity per shipper needed, fixed cost,
- 2 different balancing systems, licenses,…
- For shipper A additional fixed cost to supply in EGT

**New:**
- JV allows automated pooling of imbalances,
- no e/e booking between zones
- A has no high opportunity cost to supply in EGT
- Commercially NW gas arrives in SE Germany
DEVELOPMENT OF COMPETITIVE GAS TRADING IN CONTINENTAL EUROPE

How to achieve workable competition in European gas markets?

IEA INFORMATION PAPER
Multi - TSO integration potential – IEA view

- Existing pipeline
- Under construction/planned pipeline
- Existing LNG terminal
- Under construction/planned LNG terminal

- UK market: Supplies: North Sea, Russia, LNG
- Nordic market: Supplies: North Sea, Russia, LNG
- Baltic market: Supplies: Russia, Norway, LNG
- North-West market: Supplies: North Sea, Russia, LNG
- South-West market: Supplies: LNG, North Africa
- Central-European market: Main East-European hub
- Adriatic market: Supplies: LNG, North Africa, Caspian
- South-East market: Supplies: Russia, Caspian, Adriatic LNG
Moffatt wholesale study, July 2008

Responses of stakeholders on the top 7 measures rated highest in terms of their positive impact on increasing liquidity in wholesale gas trading (10 highest priority – 1 lowest priority)

Chart 50: Factors Impacting upon Future Liquidity – Gas
(total responses 2552)

- Incentives to encourage investment in national and cross-border transit capacity: 6.4, 7.7
- Harmonisation of market rules relating to network access, balancing and incentives for new network: 6.0, 7.1
- High level, minimum EU-wide standards for disclosure of capacity, flow and storage data: 6.4, 7.0
- Forcing more entry-point trading of long term gas contracts: 5.5, 6.9
- Impose “use it or lose it” conditions to maximise use of pipelines/interconnectors: 6.8, 6.3
- Use of gas “swaps” to facilitate cross-border trading: 6.8, 6.3
- Remove gas market fragmentation (eg sub-regional markets) and encourage larger “hub” spot markets: 5.1, 6.7

Liquidity, Practicality
Highlights

- Congestion at almost all borders and acquired transit capacities are often not used (86%)
- Intransparent market in the entire region (prices, storage access etc).
- Traders welcome an entity to coordinate transportation capacities
- Traders are in favour for an international independent coordination office for balancing energy in the region
- Hubs have to improve their liquidity and information management
- Balancing energy should organised via hubs
- Lack of standardisation concerning procedures, information, licensing standards and IT systems.

Trader Survey Gas 2008 • First Results
Concrete multi - TSO integration potential?

- JV (NetConnect) of EGT and Bayernet is a good new example for a start – others in Germany to follow (there are still far too many systems!!)
- Former JUGEL, also US might give some lessons to be assessed
- New potential internationally:
  - CZ and Slovak system have been designed, built and operated jointly originally - only separated with split of country!!
  - What are the technical problems for re-integration??
  - GTS – BEB: same owner, would boost liquidity of TTF
  - GRTgaz – Fluxys: opportunity missed with Suez GdF merger?!
- Energy community:
  - World Bank study on gasification asks for regional approach
  - Energy Community Secretariat asks for the creation of the Balkan ring to boost SoS
- ENI proposal of EU-TSO
Conclusion

- Overwhelming support from many market participants fostering stronger multi-system integration and respective 3rd package amendments adopted by EP
- Some few positive signs on the ground (Germany!), much is still to be achieved, ENI proposal, MOL proposal
- Recent wave of company mergers, take-overs and co-operations create a complex multinational structure which can only be handled on a regional and best European level
- National possibilities limited – see credit crunch
- EC oversight and lead necessary for legislative consistency
- Even IEA suggests the creation of regional market for pragmatic and technical reasons