

A conceptual model for European gas markets: CEER's "Gas Target Model"

**2nd Meeting of the UNECE Gas Centre Task Force Group
on Gas Market and Regulation**

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Konrad Keyserlingk, Office of Gas and Electricity Markets (Ofgem)

1. Introductions

Ofgem

(Office of Gas and Electricity Markets)

- National Regulatory Authority for Great Britain
- Primary statutory duties relate to protection of consumers, promotion of competition and network regulation
- Also obliged to contribute to the development of the single European energy market – important for the future of GB energy markets

CEER

(Council of European Energy Regulators)

- Non-statutory body representing the interests of independent European energy regulators
- Membership from every EU State
- Small secretariat in Brussels, work mostly led by members
- Governed by General Assembly (almost the same as ACER's Board of Regulators)

1. Introductions

Background/ context

2. Background to EU energy policy
3. Background on CEER's gas target model project

CEER's Gas Target Model

4. Creating functioning wholesale markets
5. Connecting functioning wholesale markets
6. Ensuring secure supply and economic investment (e.g. investment)

2. Background to EU Energy Policy

European Commission's Energy Sector Inquiry (2007)

- too much **market concentration**;
- a **lack of liquidity** (problem for new entry);
- too **little integration** between Member States (barrier to cross-border trade);
- an **absence of transparently available market information** (difficult for small competitors);
- an **inadequate current level of unbundling** (which may lead to discrimination and wrong investment incentives);
- **Contractual congestion** (barrier to cross-border trade and market entry);
- **Small, fragmented balancing zones** (which favour incumbents).

<http://ec.europa.eu/competition/sectors/energy/inquiry/index.html>

2. Background to EU Energy Policy

The Third Energy Package (2009)

- TSO unbundling
- Designating independent **National Regulatory Authorities (NRAs)**
- **Consumer protection** provisions
- Setting out principles for **infrastructure access rules**
- Creation of the **Agency for Cooperation of Energy Regulators (ACER)**
- Creation of the **European Networks for Transmission System Operators**
– one for electricity and one for gas (ENTSO-E and ENTSO-G respectively)
- Allowing for **European Network Codes** and **Framework guidelines**
- Requiring ENTSOs to publish non-binding **Ten-year Network Development Plans (TYNDPs)**

Is “market design” now complete?

Will this solve the problems identified in the sector inquiry?

Or do we need more of a common vision to achieve the internal energy market by 2014?

3. Background to CEER's gas target model project

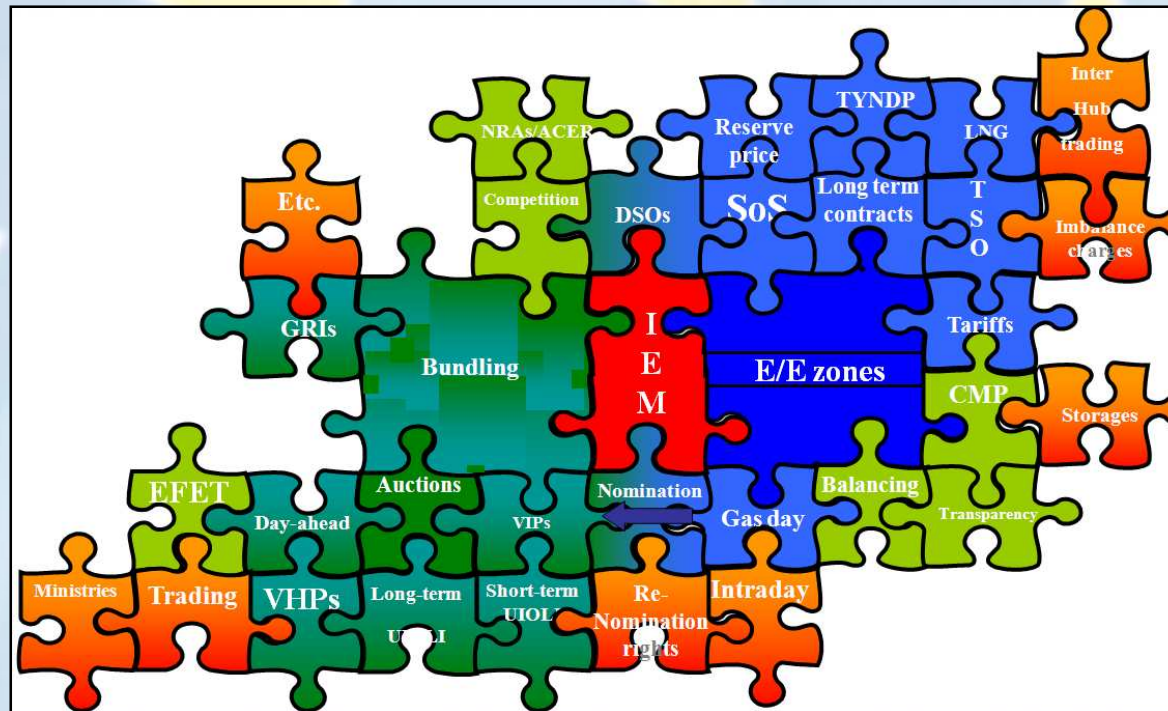
CEER's project on a conceptual model for European gas markets (2011)

- Project managed by Ofgem, E-Control (Austrian energy regulator) and Bundesnetzagentur (German energy regulator)
- Call for evidence in Autumn 2010, public consultation in 2011
- 5 public workshops, many expert studies
- Final “conclusions paper” published in December 2011



But this is only the beginning...

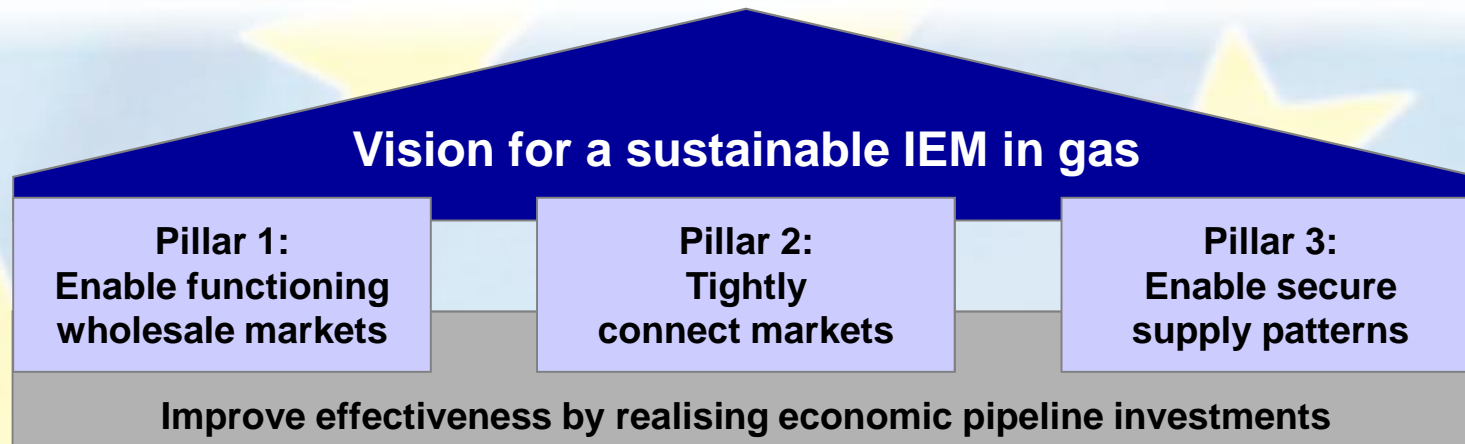
3. Background to CEER's gas target model project



- A general vision for the development of a European gas market by 2014
- Guidance for Framework Guidelines and (pilot) projects
- It is **not** legally binding, however should be perceived as the overarching strategy behind the legally-binding Framework Guidelines
- CEER project started in December 2010, ended in December 2011, led by Ofgem, Austrians and Germans

The term “gas target model” refers to the general direction of travel of EU gas policy.

3. Background to CEER's gas target model project



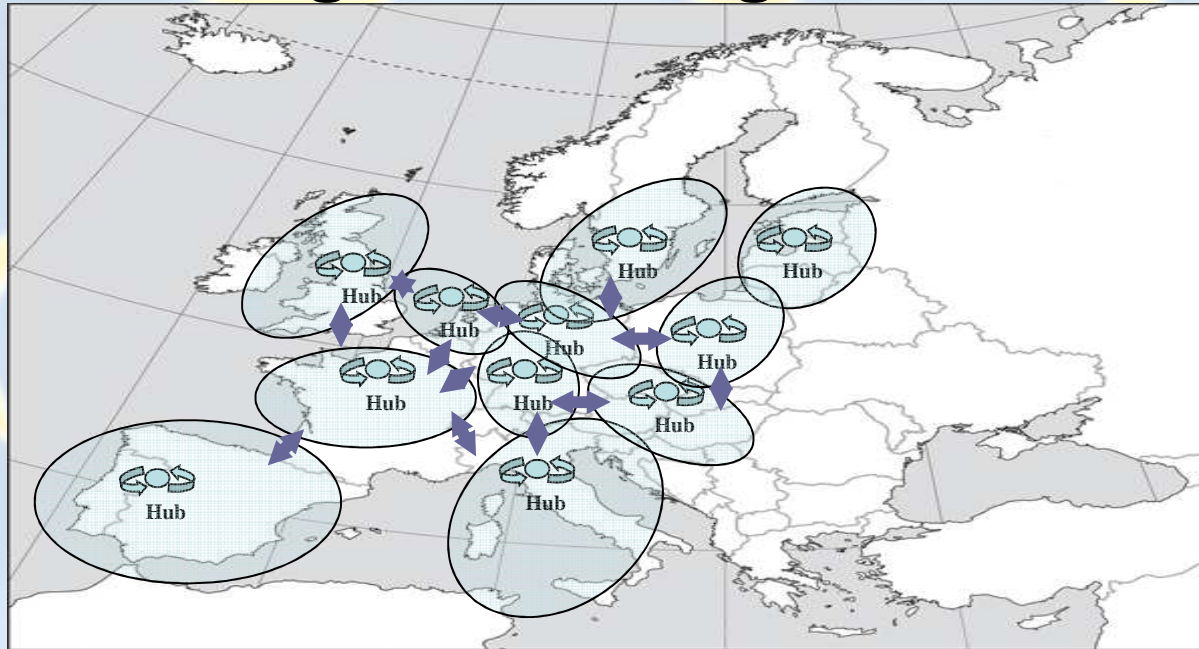
Pillar 1: Structuring network access to the European gas grid in a way that enables functioning wholesale markets, implementing entry exit systems, change shapes of balancing zones (“market areas”).

Pillar 2: Implement efficient cross-border capacity allocation mechanisms, congestion management rules, potentially market coupling, fostering short and mid-term price convergence between the functioning wholesale markets.

Pillar 3: Enabling the establishment of secure supply patterns, facilitating efficient cross-border investment.

4. Enabling functioning wholesale markets

Pillar 1: enabling functioning wholesale markets

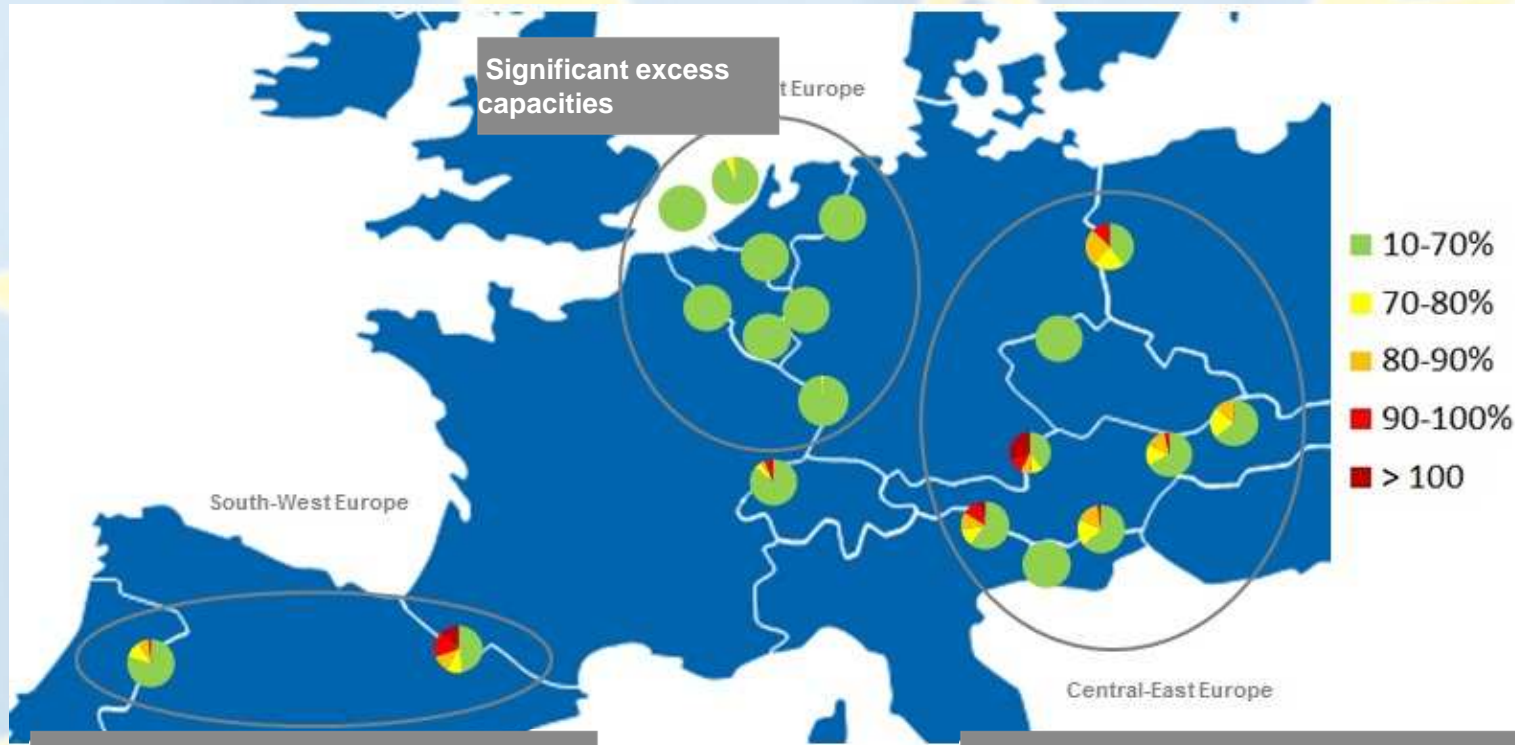


- Entry-exit systems (Requirement from Third Package)
- Trading takes place on liquid hubs
- Market-based balancing rules (being developed in European network code on gas balancing)
- Market transparency (Gas Regulation, REMIT, etc)

“Each regulator to review, where necessary, measures to improve wholesale markets”

4. Enabling functioning wholesale markets

Recent study by E-Bridge for Austrian regulator E-Control

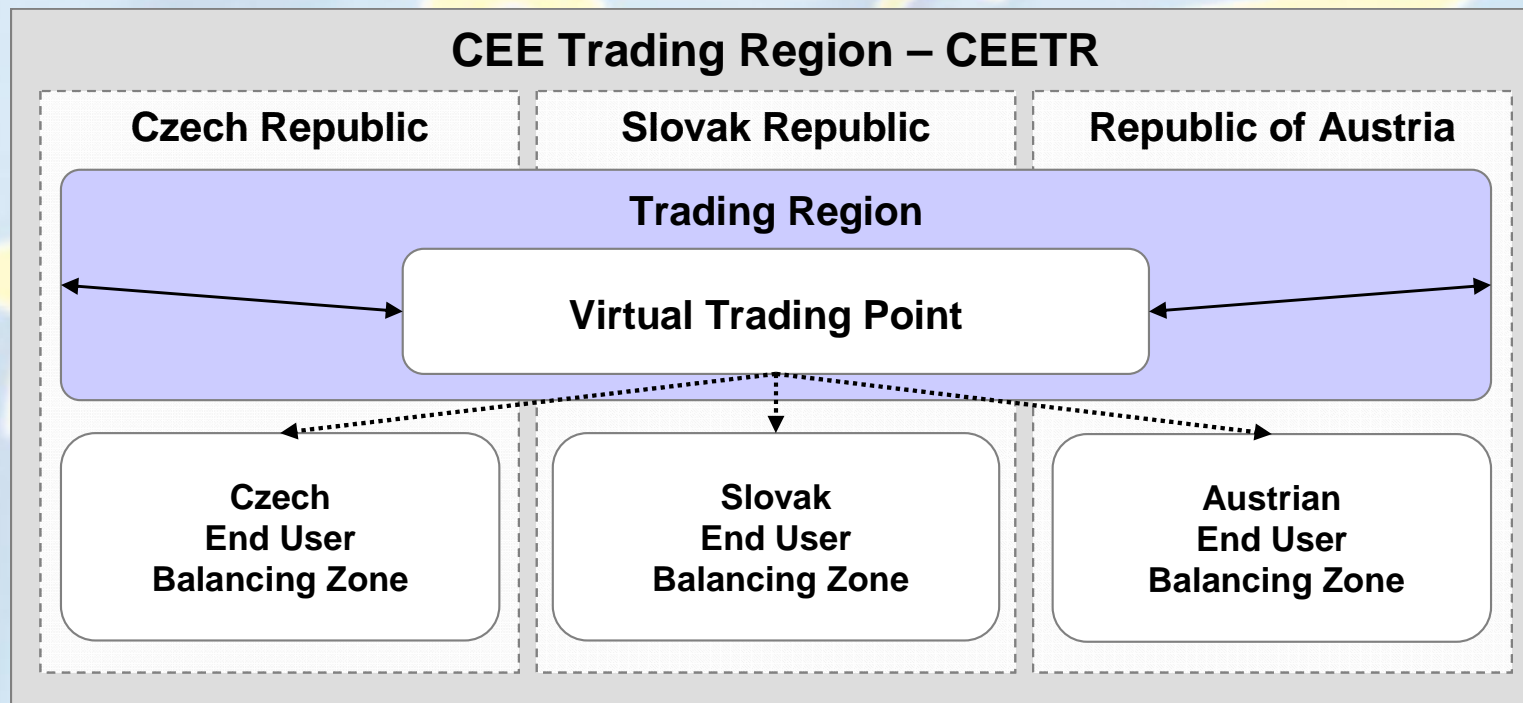


Excess capacities during most of the time
Very high capacity utilization between FR/ES during winter time

Substantial excess capacities
High capacity utilization between AT/IT and DE/PL
Physical congestions between AT/DE

4. Enabling functioning wholesale markets

Project ongoing in South East Europe



↔ Nominated transfer of gas into / out of the trading region (physical mainflow or counterflow transport)
➔ Nominated transfer of gas from the balancing system of the trading region to an end user balancing zone

5. Connecting wholesale markets

Pillar 2: connecting wholesale markets

“Gas needs to flow to where it is valued most.”

Capacity Allocation Network Code (currently being finalised)

- Allocate interconnection capacity to those that value it most through auctions
- Bundle interconnection capacity (exit and entry capacity on the same point)
- Make interconnection capacity available on one central booking platform

Congestion Management Procedures (to be implemented by October 2013)

- Undermine capacity hoarding through overselling and buyback and/or effective use-it-or-lose-it provisions

Network Transparency Rules (already legally binding)

- Network users need to know what capacity available, how much it is worth and how they can get it

Non-discriminatory tariff rules (currently being developed)

- Cross-border flows should not subsidise domestic demand or vice versa

Unbundling rules (already legally binding)

- To ensure that network companies face the right incentives

“NRAs shall review market integration and consider whether measures, for example implicit auctions, need to be taken to ensure a more efficient use of interconnection capacity”

5. Connecting wholesale markets

Ofgem's interconnector project (I)

- Joint project with Dutch and Belgian regulators
- Currently looking at whether or not cross-border flows are efficient
- Call for Evidence closes in December
- Public workshop on 21 November
- Initial indications are that cross-border flows often are inefficient, particularly in extreme circumstances which is concerning

5. Connecting wholesale markets

Ofgem's interconnector project (II)

Figure 1: Gas flows on IUK between GB and Belgium

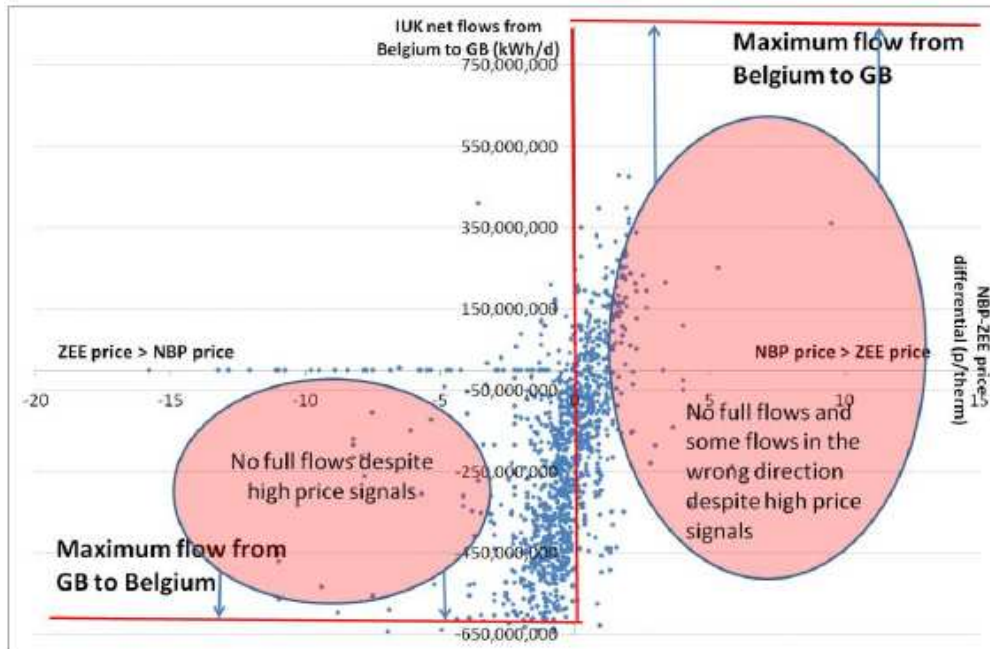
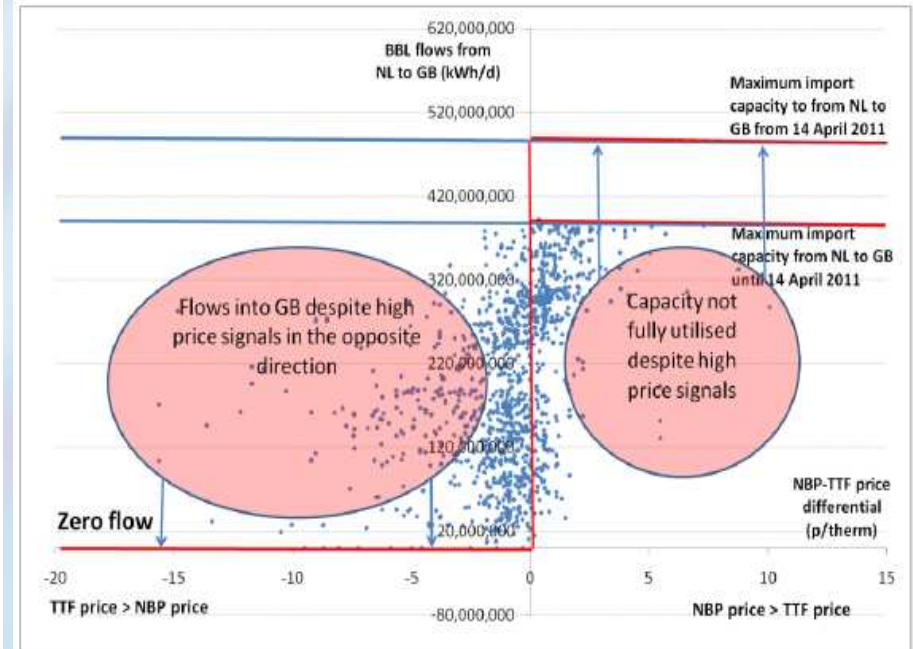


Figure 2: gas flows on BBL between the Netherlands and GB



Gas does not always appear to flow to where it is valued most and that is a problem.

6. Ensuring secure supply patterns

Pillar 3: Investment

- Historically, Open Seasons were key tool to bring about cross-border investment
- Do they work well? Can we do better? How does investment interact with auction-based allocation of existing capacity?
- GB incremental capacity regime successful (alternative to Open Seasons?) – can it work across borders?
- Will the GB merchant approach to investment continue?

TSOs jointly identify options for investment in additional cross-border investment

TSOs consult relevant NRAs on the costs

NRAs agree on economic test (amount of NPV that needs to be covered by user commitment)

TSOs jointly hold a bidding process for additional capacity

NRAs approve investments if test is met (but open to other criteria?)

Project ongoing in CEER, chaired by Ofgem, Germans and French.
 First consultation process has concluded.
 “Blueprint” to be presented next Spring.

Thank you for your attention!

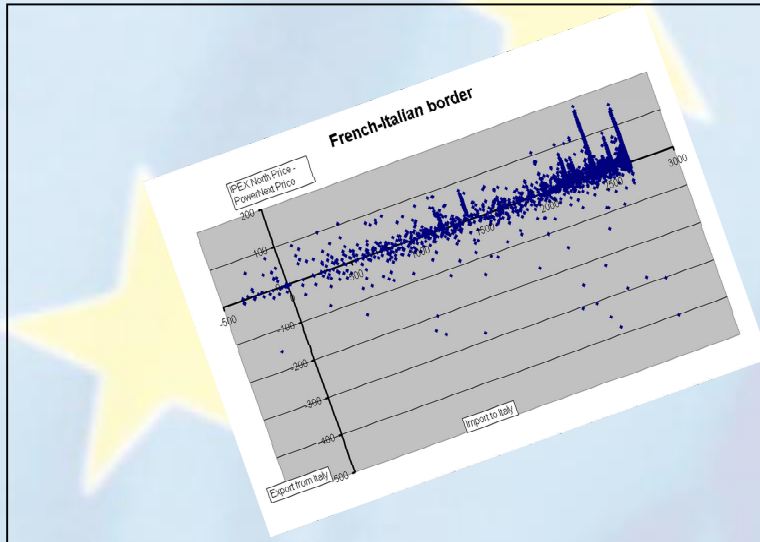
www.energy-regulators.eu



ANNEX: Market coupling



Before electricity market coupling



Inefficient cross-border flows in Europe

Low liquidity

Lack of competition

Lack of reliable price signals

Insufficient levels of price convergence

DG Competition energy sector inquiry (2007):

“Explicit auctioning has efficiency deficits compared to implicit auctioning”

ERGEG Coherence and Convergence report (2007):

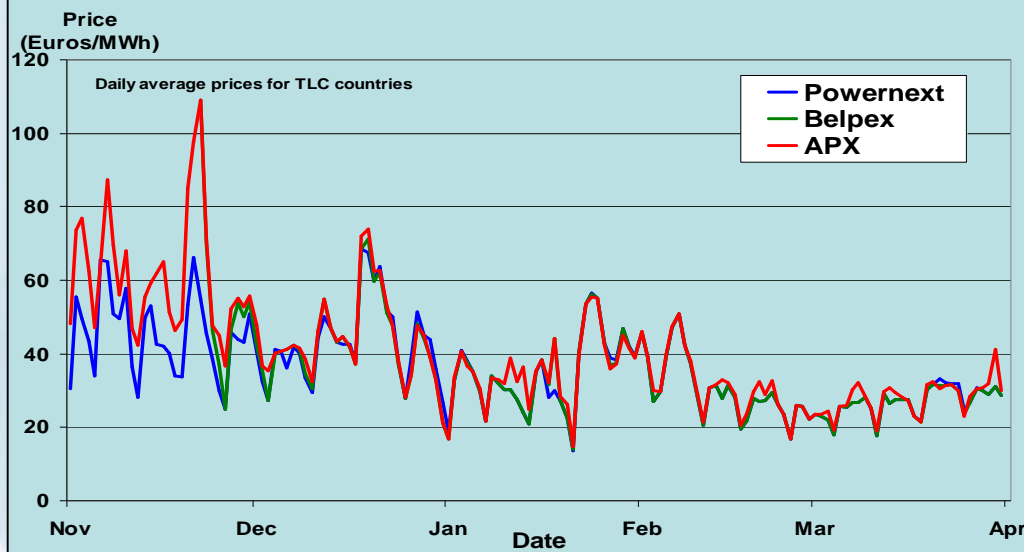
“Implicit auctioning may be superior to explicit auctioning in allocating capacity even for immature energy markets”

Electricity market coupling contributed to the realisation of the EU vision of an integrated European energy market

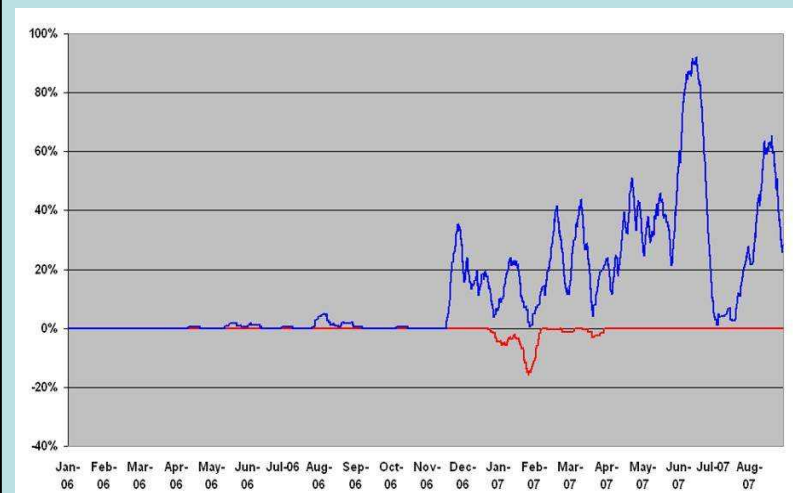
- Optimal utilisation of interconnection capacity
- Increased trading volumes
- Lower transaction costs due to implicit capacity allocation
- Transparent price signals
- Level playing field

Examples for benefits from market coupling in electricity

Increased price-convergence between Powernext, Belpex and APX



Time % of fully utilized capacity on Dutch-Belgian border (Jan 2006 – May 2007)



Electricity market coupling delivered improvements in price convergence and utilisation of interconnectors