



Issues Arising at the Regional Mini Fora

Observations by EuroPEX

8th of April 2005

This note provides EuroPEX's observations on some of the issues and questions with respect to market coupling that arose at the recent regional mini fora.

1. EuroPEX attended all seven regional mini fora and presented, together with ETSO, the Flow-based Market Coupling ('FMC') model. Individual EuroPEX members were also present at all fora (except UK and Ireland) representing individual PXs.
2. EuroPEX was pleased to note the support for market coupling given by the Commission and various regulators at the fora. FMC seemed to provide a valuable service by providing a common frame of reference for the regional discussions.
3. A number of issues and concerns arose in the various fora relating to market coupling, and EuroPEX would like to offer its observations on these issues. The issues are as follows:
 - a. Whether market coupling is achievable in the near term, or should be seen as an eventual goal;
 - b. How the various initiatives being launched can all be achieved, given that some countries are potentially being impacted simultaneously by more than one coordination mechanism project (the various projects are listed in Appendix 1);
 - c. How these various initiatives can eventually converge to provide a Europe-wide solution;
 - d. Whether there is sufficient liquidity in all of the PX markets to provide an efficient cross-border mechanism (where, for example, the cross-border flows are greater than the current volumes matched on the PX);

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- e. Whether a decentralised coupling process is too complex – for example, due to the iterative algorithm, the dispersed operational responsibility, and the lack of a central, regulated organisation;
 - f. Whether a minimum level of capacity should be reserved for the day-ahead market coupling;
 - g. How to solve cross border congestions after the day-ahead markets are managed – i.e., intraday.
4. A new model variation called "Open Market Coupling" was also introduced by EEX. This concept seems to present a number of similarities with FMC. We are planning a more thorough consideration of the features of OMC, and will report our conclusions soon.

a) "Market coupling only a longer term goal"

5. There were some comments that implicit auctions were very desirable but complicated, and should, as a consequence be seen as a longer-term goal. However, it should be recognised that practical and efficient multi-national day-ahead implicit auctions have existed for several years (for example, in the Nordic region via market splitting). Furthermore, some local projects are well advanced building the systems and commercial/regulatory structures to enable market coupling, and these could be ready for operation in the very short term.
6. However, it will be necessary for markets being asked to join different coordination mechanisms to establish feasible solutions for the practical implementation of market coupling – see b) below.

b) Overlapping initiatives

7. The Commission and the mini fora seem keen to push forward as many initiatives as possible, but at the moment there is no clear overall plan. Many initiatives overlap: some countries (for example, France and Germany) are potentially impacted by several coordination mechanisms. However, there is only one market price in each PX and it is not yet well understood whether or how these different coordination mechanisms will integrate together.
8. The problems associated for the practical implementation of overlapping initiatives need to be addressed through a viable approach; in the meantime interim solutions

could be explored that move in the direction of the final goal. Therefore, it is important to ensure the compatibility of the interim solutions.

9. Ideally, there would be a good understanding and agreement on the sequence of steps across Europe. This is beyond the scope of the individual mini fora. Indeed, it may be that the mini fora should be rescoped to reflect the markets involved in the likely sequence of foreseeable initiatives.

c) Eventual convergence

10. It was clear from attending all the fora that a number of different approaches are being taken in the various regions. While these initiatives by themselves are positive, their diversity may make it difficult to eventually converge towards a single pan European market.
11. The emerging pattern seems to be as follows:
 - a. Market coupling between the markets along the western seaboard of Europe – from Norway to the Iberian Peninsula. Both PXs and TSOs are heavily involved in the process. Because the coupling involves a linear sequence of markets, there is no immediate need for a flow-based transmission model;
 - b. Coordinated explicit auctions in Central Eastern Europe. The TSOs are driving the process here. This may eventually evolve into a flow-based approach and may also eventually lead to day-ahead implicit auctions;
 - c. Italy is doing its own thing;
 - d. Germany is acting as the central link across Europe, based on explicit auctions (strongly supported by the German TSOs) in the monthly and annual horizon and further development of the explicit auctions to practically implicit auctions in the day-ahead horizon.
12. In effect, it appears that FMC could be breaking down into “F” in the east and “MC” in the west. However, this may be the only practical way to go given the parties involved – unless and until the Commission wishes to impose a clearer master plan.

d) Inadequate existing PX liquidity

13. Some have queried the viability of market coupling where the local PX has relatively low liquidity. The first point to make is that PX matched volumes are not the only

relevant indicators: one should also look at the depth of market interest (resilience) and the size of the OTC/bilateral market that is linked to PX prices (via arbitrage). It should also be taken into account that:

- market participants will adjust to potential price movements caused by market coupling; liquidity in the PX will increase as a consequence;
- whatever the congestion mechanism, cross-border trade already influences volumes and prices on Power Exchanges.

14. Market coupling is always at least better than explicit auctions in the day-ahead market *even if there is minimal local energy matching* because it provides transparency, open access, netting and avoids contradictory price signals.

15. Day-ahead market coupling is more effective than day-ahead explicit auctions because, in generating horizontal liquidity, it can help enable the emergence of efficient energy markets where these do not currently exist (which is presumably the aim of the internal electricity market) – e.g., Belgium. Rather than liquidity being a prerequisite it should be seen as a goal.

e) Complexity of decentralised approach

16. Some concerns were voiced over regarding the feasibility of a largely decentralised approach. This approach, however, merely reflects the practicalities today where system operation, regulation and physical delivery are decentralised. Furthermore, a decentralised approach that retains an emphasis on local markets is appropriate given that the majority of trades in most markets are likely to be between local bids and offers, not cross border.

17. Nonetheless, EuroPEX acknowledges that FMC only provides an outline and that the practical issues need to be addressed. However, these issues will be addressed and resolved as work proceeds on actual implementation projects.

18. Initial implementation projects are likely to involve only clusters of a few markets. Further issues will be faced when clusters expand or link to other clusters. At each stage, thorough testing of the algorithm and operational procedures will be required and undertaken, to the satisfaction of the PXs, TSOs and regulators involved.

19. A more centralised approach *may* be better *if* the decentralised approach proves incapable of resolving more complex situations (and is certainly not ruled out).

However, this has not been shown to be the case so far (work to date in the various local projects shows a decentralised model is feasible), and there may be a range of alternative solutions – for example, a combination of decentralised and centralised processes still in general accordance with the principles and processes presented in the EuroPEX-ETSO FMC model. Furthermore, a more centralised approach may have its own limitations when investigated further.

f) Reserved capacity for market coupling

20. There remains an issue about how the amount of capacity auctioned via forward explicit markets or via market coupling. In EuroPEX's view, a transparent, predictable and consistent volume of physical capacity is needed to ensure fair and efficient markets. At a minimum, existing capacity currently held back for day-ahead explicit auctions should be made available to the implicit auction. Logically, more capacity should be available for market coupling than for forward physical rights because the latter are typically non-binding capacity options where netting cannot be assumed.
21. The problem is avoided if all physical capacity is available for market coupling, and price hedges are provided via financial rather than physical forward contracts.

g) Intraday capacity

22. Currently FMC is a day-ahead mechanism and it is necessary to also explore solutions for intraday mechanisms, possibly connected to FMC, where intra-day markets exist.
23. If the TSOs have unsold capacity after the day-ahead market, or new capacity becomes available, it is necessary to have solutions for intraday congestion management. The PXs stand ready, as for the day ahead, to provide solutions that are highly compatible with the local energy markets.

Appendix – Coordinated congestion management initiatives

	“BELPEX”	Central Eastern Europe	France-Spain	Germany - Austria	Iberia	Kontek	NorNed
Region	France, Belgium, The Netherlands	Austria, Germany, Poland, Czech Republic, Hungary, Slovakia, Slovenia	France, Spain	Austria - Germany	Spain, Portugal	Germany, Denmark	Norway, The Netherlands
Parties	TSOs, PXs	TSOs (not PXs)	TSOs, PXs	TSOs	OMEL (Spot market), Capacities provided by TSOs	PXs, TSOs	PXs, TSOs
Network model	Not flow-based (radial region)	‘Coordinated’ – building on existing approach between Poland, Germany and Czech Republic	Not flow-based (radial region)	None	Not flow based	Not flow-based (HVDC)	Not flow-based (HVDC)
Congestion Management mechanism	Forward allocation of PTRs Day-ahead market coupling (no price-difference bids)	Explicit auctions (forward and day-ahead)	Three steps agreed by both regulators (France and Spain): S1: Forward explicit auctions + a mechanism to apply the “use it or lose it” rule not yet defined. S2: forward explicit auctions + day-ahead market coupling (capacity ceiling) S3: removal of capacity ceiling and the possibility to select “use it or sell it”	A cooperation cross border trade mechanism including market coupling	Market Splitting (under final discussion)	Day-ahead Market Coupling of all the at that stage available free capacity.	100% day-ahead market coupling (no forward physical rights)
Foreseen launch date	Q4 2005	Jan 2006	S1: mid-2005 S2: 2006	April 1st of 2005	June 30, 2005	TBD	Q1 2008
Status	Ongoing project	Project between TSOs	Proposal by regulators, yet to be officially approved and published by France and Spain	operating	Pending final detailed regulations in both countries	Working Group established between PXs (NPS & EEX) and TSOs (EKS & VET) since a year. In the mini-fora Northern Europe it was agreed that the Danish regulator will help initiate further discussions on MC.	Cable project approved and underway Commitment made to regulators re: coupling