

## **ERI convergence and coherence report and related public consultation: Contribution by Powernext**

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## 1. Introduction

Pownernext fully supports ERGEG and the Commission's view that a regional approach is a "practical and achievable way of delivering progress on the move towards a single electricity market". We therefore welcome the initiative by ERGEG to consult stakeholders on the ERI convergence and coherence. Our contribution will not address all aspects of the consultation but will be focused on day-ahead congestion management, an area in which Pownernext has gained significant experience and expertise over the past few years, the lessons of which can be valuably shared. For the sake of consistency and completeness, we shall answer to the views sought in the consultation paper through a document having its own structure. The specific questions asked by ERGEG on day-ahead congestion management are however largely addressed within the text.

Market coupling is undoubtedly an attractive way of improving the efficiency of European electricity markets through their integration. It limits the transaction costs likely to occur in explicit auctions systems; it provides at the same time relevant market signals thanks to its method of pricing which integrates capacity prices. For this reason, Pownernext has been supportive of the early market coupling initiatives from their inception and has been directly (and heavily) involved in several implementation projects. Among those, the launch of the Trilateral Market Coupling between France, Belgium and the Netherlands in November 2006 demonstrated what can be achieved through a balanced and voluntary cooperation between several Exchanges and TSOs. Other projects, however, have encountered significant difficulties and TLC is so far the only successful example. A key market coupling project is now starting in the CWE region, following the MOU<sup>1</sup> and the CWE Action Plan<sup>2</sup>. TSOs and PXs of this region are currently setting up a project structure and preparing to invest a considerable amount of effort to achieve this ambition. At such stage, one should build on experience from the past.

Trustful in the important benefits which can arise from such integration processes, and which TLC demonstrates, we have also gained awareness on the limits and challenges in implementing market coupling projects. We would like to take the chance of this public consultation to share some of those lessons (section 2), and outline a pragmatic medium-term vision of how to integrate European markets (section 3).

*Nota: Wherever relevant, mentions to the ERGEG position paper will be done, by indicating in brackets the number of the paragraph of the report referred to in our answers.*

## 2. Assessment of the regional initiatives: feasibility and coherence

### 2.1. Compatibility [ERGEG report, §70-77, §131]

Compatibility of regional market couplings is addressed in the ERGEG report, a.o., through the following question: "Can day-ahead market coupling and market splitting coexist as such?"

We will come back very specifically to this issue later in the report but would like first to bring a couple of clarifications.

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<sup>1</sup> Memorandum of Understanding of the Pentilateral Energy Forum on market coupling and security, 6 June 2007 - [http://www.benelux.be/nl/pdf/act/act61\\_PENTA\\_06-07\\_MoU-en.pdf](http://www.benelux.be/nl/pdf/act/act61_PENTA_06-07_MoU-en.pdf)

<sup>2</sup> Proposal for an Action Plan based on MiniForum stakeholder consultation of 20th June 2006 - [http://www.ergreg.org/portal/page/portal/ERGEG\\_HOME/ERGEG\\_RI/ERI/Central-West/Meetings/IG%20Meetings/1SUPstSUP%20CW%20IG](http://www.ergreg.org/portal/page/portal/ERGEG_HOME/ERGEG_RI/ERI/Central-West/Meetings/IG%20Meetings/1SUPstSUP%20CW%20IG)

### *Market coupling and market splitting*

It should be clear that **technically speaking, market coupling and market splitting are equivalent**. In both mechanisms, a single algorithm determines, on the basis of the Power Exchange order book (or a representation of the Power Exchange order book), for each settlement period, the price and net position of each market, under the constraints of a network model specified by TSOs (ATCs or a set of PTDFs and physical margins).

Market coupling involves several PXs that have to coordinate their core process (i.e. matching) within a common system. Market-splitting implies that one single PX operates the spot markets on different hubs (may also be possible by a merger of the spot markets of several PXs) and handles the matching and pricing functions for all corresponding hubs.

### *Compatibility of separate market coupling initiatives [ERGEG report, §14-15, §131]*

Before coming to how market splitting and coupling can be combined (in section 3), we would like to make clear that, **process-wise, independent overlapping market coupling/splitting mechanisms are impossible, unless some degradation in efficiency of one of them is accepted**. This is a consequence of the very nature of market coupling/splitting, i.e. integration of price determination: when a price-zone is involved in two separate coupling/splitting mechanisms, either those two mechanisms are in fact merged into one, or they have to happen through a sequential process by which provisional prices for the said zone will first be determined within one region and final prices within the other one.

## **2.2. Challenges for regional initiatives: process issues**

### *Managing the trend for day ahead implicit auctions: the risk of having too many initiatives*

The multiplication of market coupling initiatives could quickly end up with a “lock-in effect”. The well-known overlapping issue described above generates priority and scope uncertainties which are constantly hampering market coupling projects. Overlapping ERI, combined with the regulatory gap mentioned by ERGEG (§ 15), i.e. the absence of an overarching oversight of interregional coordination able to define priorities, can be considered today as one of the major hindrances for progress of market coupling in Europe.

### *The risk of an increasing number of parties*

**Another major challenge concerning the feasibility of market coupling initiatives is related to the increasing number of parties such initiatives can involve.**

Market coupling typically involves entities of very different natures (commercial vs. regulated-costs-and-revenues, private vs. public, regulated by different regulators, etc...) having different incentives, and lacking a common framework able to direct them towards an overall agreement. Ultimately, what is sought is agreement between independent companies whose core business is potentially significantly impacted by market coupling - in other words, unanimity is required.

When a limited number of stakeholders take part of a common project, the rule of consensus remains suitable since enough common interest can be found among the participants. This was for example the case with the TLC project. However, once the number of participants increases, common interest becomes harder to define, and consensus harder to find; the more so if some parties are, at the same time, involved in other neighbouring market coupling projects.

### *Ambitious deadlines*

The inevitable consensus requirement implies complex and heavy design processes and implementation processes. In this respect, excessively firm deadlines have proven to be counter-

productive. Time dedicated to consensus building (i.e. the “agreeing” vs. the “doing”) should be protected. Flexibility in the timetable is important for the good achievement of the project. Close regulatory oversight is essential and should focus on monitoring whether key issues (see below) are being timely addressed by TSOs and Power Exchanges.

### 2.3. Challenges for regional initiatives: governance issues [ERGEG report §78-80]

We would like in this section to address the issues mentioned in §78-80 of the ERGEG report. We recognise that the commercial status of most PXs raises issues within market coupling - some of which could slow down market coupling development, but we would like to:

- bring a couple of clarifications and complements on their nature
- illustrate how they can be addressed - or have already been practically addressed in some instances.

#### *Regulatory supervision of market coupling*

The statement that implicit auctions give a monopoly to PXs is misleading:

- Several major Power Exchanges (e.g. Pownernext) have no legal monopoly (respectively in France or on the French hub) and are competing with brokers, including on day-ahead power. As regards Pownernext, contributing to TLC has not changed this situation.
- With market coupling, participants can still move power across a border in day-ahead, if they buy (OTC or on PX) on one side and sell (OTC or on PX) on the other side of the said border. They can also buy capacity in longer-term explicit auctions if they want to secure the cross-border price-difference.
- Finally, PXs do not “use” cross-border capacity as a market participant would do. With market coupling, TSOs do not “provide capacity to Power Exchanges”; on the contrary, Power Exchanges provide a service to TSOs, who have then chosen to delegate day-ahead congestion management to Power Exchanges. They do so because by definition market coupling requires the use of the Power Exchanges assets in order to calculate a price which implicitly includes the price of congestion. It is difficult to argue in favour of an administered way of managing capacity use and to regret at the same time that such capacity is no more available to the market. Such availability can be provided by explicit auctions.

Similarly, the relationship established by the ERGEG paper between market coupling and regulation of Power Exchanges fees is far from obvious. Fees charged by the PXs apply to local energy transactions and are most of the times determined in an environment subject to normal competition with the brokers. No change in the TLC PXs fees has been observed in relation with the implementation of TLC.

Whether or not involved in market coupling, PXs are already regulated in several ways. There could be two areas of regulation impacted by market coupling:

- Surveillance: transactions are, depending on local framework, subject to a legal scrutiny by the energy regulator, which usually has access to the relevant data for this purpose. With market coupling, regulators may need to exchange such data between them, which for instance in TLC the PXs have helped to facilitate.
- Control of the allocation arrangements: via the TSO, the energy regulator also can have the ability to control the allocation rules and the financing scheme which remunerates the PX for the market coupling service; this can be easily achieved through a contractual approach (as it is the case in the TLC).

### *Market coupling financial aspects*

There is now some awareness that the business case of a Power Exchange in market coupling varies materially from country to country. Whereas some Power Exchanges depend to a vital extent on market coupling liquidity in order to set prices every day, for an established Power Exchange the effect on volume fees is marginal; it can even be negative. The move to a load flow-based allocation increases the likelihood of such situations. On the other hand, the implementation of market coupling involves material resources and costs. **The coverage of the implementation costs must be ascertained in the early stages of a market coupling project**, as recognised by the second statement of \$79.

### *Commercial risks*

Power Exchanges involved in market coupling de facto accept a dilution of their sovereignty. Depending on the governance arrangements, market coupling may involve significant business risks for a commercial Power Exchange, namely:

- In case a specific entity (“MCO”) is created to operate market coupling, a risk of abusive competition by free-riding on the Exchanges prices, should the MCO, which now calculates those, decide or be forced to open access to such prices to candidate competitors of the Exchange who provides the initial liquidity, or directly to participants - the MCO becoming then a competitor itself. Volume coupling (i.e. Power Exchanges set their own local prices) does not eliminate such risk. In case a market is very liquid and coupling is tight, the “shadow price” determined by the CCU will be most of the time equal to the local price recalculated by the local Exchange.
- A more undertone risk is the loss of control over the circulation and use of market data by third parties.
- Loss of control over own market arrangements, potentially to the detriment of market efficiency, security or liquidity or to the detriment of specific participants’ needs
- More generally, loss of control on the core-functions of matching

**The above issues, combined with the risks associated to the complexity of the process aspects, can indeed act as disincentives playing against the involvement of Power Exchanges in market coupling initiatives.**

If however it is considered desirable to progress with market coupling in the short-term, independently from institutional or corporate changes, there are pragmatic ways of addressing those issues. The governance model of the TLC system provides a good example: a multilateral contractual framework preserving the natural responsibilities of PXs (price-determination) and TSOs (capacity determination and allocation), full transparency over the arrangements, regulatory approval according to local laws and regulations, remuneration of the market coupling services rendered by the Power Exchange as per a contract between with the local TSO, under the scrutiny of and with full transparency towards the regulator.

Power Exchanges have shown a proactive and flexible attitude in those matters.

In the next part, we develop an overarching vision for long-term solutions aiming at addressing the issues of interregional coordination raised further up. In particular, we propose some alternatives to a market coupling-based integration process, whose limits we have presented before.

### 3. A vision for the future: Looking for acceptable alternatives for interregional connections

Acknowledging the difficulties to implement in the short term a general implicit auction system at an interregional scale, we would like to present the outline of a dynamic and pragmatic model for medium-term integration of day-ahead power markets, which consists of three elements

#### 3.1. The move towards market splitting [EREGE report, §131]

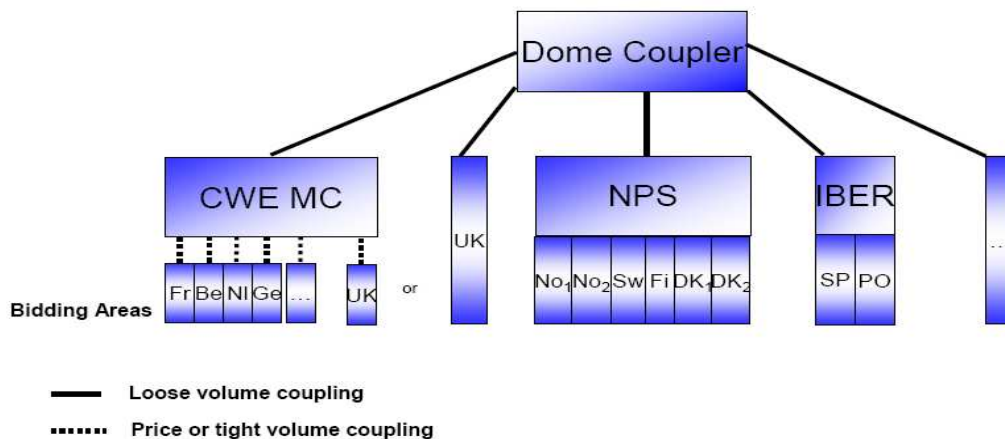
In line with §121 of the EREGG report, Powernext supports a dynamic extension of implicit auctions, where the gradual introduction of market splitting (as opposed to market coupling) will play an important role in meshed regions involving a large number of countries - e.g. continental Europe. Market splitting reduces the number of stakeholders and simplifies contractual arrangements. **We believe that without market splitting, i.e. the emergence of a single Exchange covering a specific region, it will become a real challenge to extend market coupling beyond isolated clusters of a couple of markets.** Market coupling and splitting can be combined in pragmatic and original multilateral governance arrangements, allowing a dynamic evolution. Similarly, a stronger coordination for congestion management issues on the TSO-side is also essential.

#### 3.2. Sequential coupling with a degree of looseness: opening the path for more flexible interregional arrangements [EREGG report, §76]

Sequential interregional coupling between homogeneous regions (e.g. central continental Europe, Scandinavia, Iberian Peninsula) is probably the most promising medium-term mechanism for interregional coupling. A “Dome coupler” would link already integrated regions or individual bidding areas. Governance of the Dome will have to manage a trade-off between tightness (i.e. optimality) of the coupling and flexibility. A degree of looseness (i.e. the dome coupler receiving only partial or simplified order book information) would:

- avoid the need for a complete replication of the local market complexities (rules and products) which is likely to be unmanageable at an interregional scale
- allow for simplified algorithms and fallback mechanisms
- dampen the governance issues described in section 2.3. and make the dome more independent and flexible.

#### Medium-Term Model 2: Inter-Regional Loose Coupling



### 3.3. Explicit auctions: an improvable transitional system [ERGEG report, §73-74]

Explicit auctions are a market-based congestion management method. As such:

- They are non-discriminatory
- They are transparent, easy to understand and use
- They provide a more efficient short-term allocation than prorata or priority lists
- They provide long-term signals on the level of congestion

Explicit auctions are therefore compliant with the “cross-border” Regulation (1228/2003) and should be seen as a valid and easy to implement alternative where conditions for a market coupling are not yet fulfilled, although market coupling is theoretically a superior method.

We therefore support the idea of using explicit auctions as a transitional solution, including for day-ahead. There is room for progress, through the harmonisation of market procedures and of market products (maturity, firmness...) and those should not have a lower priority than market coupling.

In addition:

- Markets linked by explicit auctions should inasmuch as possible keep separate gate closure times. Harmonisation of gate closure times is necessary only in implicit auctions systems, while it might be detrimental to market participants trading in explicit auction systems. Indeed, a gap between Power Exchanges GCTs is necessary in order to allow traders to make price-relevant orders on the neighbouring markets: efficient use of the border is not possible if both markets are cleared simultaneously.
- The development of cross-border intra-day markets should also improve the relative performance of explicit auctions compared to market coupling.

## 4. Conclusion

Powernext is fully supportive of the pragmatic and step-by-step approach adopted by the ERGEG in its position paper on the ERI coherence and governance.

As regards progress with market coupling, we emphasized in our answer some important feasibility issues which arise once processes are analysed, especially at an interregional scale. We identified that a consistent regulatory oversight, focussed on defining priorities, monitoring the timely resolution of key governance issue, providing adequate planning flexibility and assurance on cost recovery, is essential to the progress of market coupling initiatives. We outlined a pragmatic way forward, through a dynamic combination of market splitting and market coupling in continental Europe, loose interregional coupling, and improved explicit auctions as a transitional mechanism.

Powernext is willing to remain a major actor of this process of interregional integration, and to actively participate to the enhancement of the economic efficiency of the European electricity market.

