



Regional market integration between the wholesale electricity markets of Belgium, France and the Netherlands

*A road map prepared by CRE, CREG and DTE
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1. INTRODUCTION

1.1. The background

On 5 July 2005, CRE, CREG and DTe published a jointly prepared consultation document concerning regional market integration between the wholesale electricity markets of Belgium, France and the Netherlands. The three regulators have invited relevant market parties to contribute on this important issue, and help define a common approach, or roadmap, for the progressive regional integration of the three markets.

1.2. The objective of the roadmap

The objective of regional market integration is maximum availability of cross-border capacity and efficient cross-border trade, to the benefit of Belgian, Dutch and French consumers.

The common approach of CRE, CREG and DTe towards regional market integration is laid down in this document. This roadmap details the different steps for the implementation of the regional market integration in the three countries. Section 7 of the roadmap summarises the implementation of the roadmap, which is aimed to start from January 2006 and onwards.

1.3. Status of the document

CRE, CREG and DTe fully agree on the contents of the Roadmap. Any delay or deviation in implementing the regulators' recommendations and/or requests will require justification and a detailed agenda for later implementation. This Roadmap in itself does not constitute any legal decisions on the part of CRE, CREG and/or DTe.

1.4. Publication of contributions

The three regulators have published all public contributions to the consultation document, as well as a joint synthesis of these contributions, on their website.¹ Readers are referred to these websites for further details.

¹ See www.dte.nl, www.creg.be, and/or www.cre.fr.

2. EXPLICIT AUCTION MECHANISMS

2.1. Allocation timeframes and price setting mechanism

CRE, CREG and DTe have agreed on the organisation of sealed bids explicit auctions at marginal price for the annual, monthly and day-ahead timeframes. They will investigate the opportunity of quarterly and multi-annual² allocation by the 1st of September 2006.

CRE, CREG and DTe favour the further flexibility for market participants brought by the staging of the 2007 yearly auction in two rounds (around 50% of the yearly capacity for each round). The first round can take place at the end of September and the second round at the end of November. The three regulators therefore request TSOs to submit a proposal for the implementation of multi-stage annual auction starting in September 2006 or will take other appropriate measures for timely implementation.

2.2. Repartition of long term capacity

The TSOs shall maximise the capacity on the interconnectors that can be offered permanently to the market during the whole year.³ This permanent capacity shall be announced to the market by the TSOs sufficiently in advance, and preferably by the 1st of September. It shall be shared between the different timeframes, with a preference for the annual timeframe. Minimum values shall nevertheless be reserved for the monthly and day-ahead timeframes. These minimum values for the monthly and daily auctions can also be laid down in national regulations or technical codes.

The discussion on the principle of reserving a minimum of this permanent capacity to the shorter term timeframes could be reopened as soon as secondary markets for trading of capacity rights are better developed (see section 2.4).

2.3. Level of firmness

CRE, CREG and DTe agree on the principle that, once nominated, reduction of programs shall not be possible except in the case of "Force Majeure".⁴ Concerning the allocated capacity, CRE, CREG and DTe advise to allocate capacities as firm as possible. Therefore, the three regulators request TSOs to agree on a precise and common definition of "Force Majeure" by the 1st of July 2006. Further, the three regulators request TSOs to implement these principles by the 1st of August 2006.

2.4. Secondary capacity markets

In order to stimulate the availability and usage of cross-border capacity, secondary trading of capacity rights must be supported by the TSOs. TSOs must offer maximum flexibility and restrictions for market participants must be kept to a minimum. The rules for secondary trading must be harmonised. CRE, CREG and DTe therefore request the TSOs to submit a proposal to harmonise rules for secondary markets by the 1st of April 2006. Once approved by the regulators, the harmonised rules shall be implemented no later than 1 July 2006.

The abovementioned rules apply to bilateral trading of capacity rights. In addition, CRE, CREG and DTe agree that secondary trading will probably benefit if a central trading platform for capacity rights is implemented. CRE, CREG and DTe therefore request the TSOs, in

² Allocation of more than one year of capacity.

³ The capacity that cannot be offered on a permanent basis should also be made available to the market to a maximum extent.

⁴ See also article 6.2 of the regulation.

consultation with market parties and power exchanges, to develop possible solutions for such a centralised trading platform and present the results to the regulators by the 1st of January 2007.

2.5. Ex-ante market power mitigation measures

On the border between Belgium and France, CRE and CREG are considering to impose ex-ante market power mitigation measures on market actors (volume caps for example) while, on the border between Belgium and the Netherlands, a 400 MW restriction on the import capacity toward the Netherlands is imposed by law.⁵

In any case, a regulatory taskforce will be constituted by the 1st of January 2006 in order to monitor the well-functioning of explicit auctions on each border. The aim of this regulatory taskforce is to propose corrective measures in case of suspected/detected anti-competitive behaviour and in case of structurally inefficient trading outcomes. An annual report will be published to give feedback to market participants of the functioning of explicit auction methods.

2.6. Product nomination

Firm nominations of annual and monthly capacity rights on borders shall take place sufficiently in advance before the day-ahead allocation. A common deadline for nominations should be adopted for these products on the two borders (at the latest at 8.00 am on the day preceding the day of transport). This firm nomination shall allow the TSOs to net nominated capacities in order to increase available day-ahead capacity.

CRE and CREG have agreed to implement the “use it or loose it” (UIOLI) rule on the Belgian-French border.⁶ The UIOLI rule implies that if a capacity holder decides not to nominate its capacity rights and/or does not sell his rights back to the TSO, he will lose them without any financial compensation. For this reason, TSOs are suggested to implement possibilities for buyers of transmission rights to sell these rights back through the daily or monthly auction, like it is currently possible on the Belgian-Dutch border. The opportunity to transform this UIOLI rule into a default “use it or get paid for it” rule should also be further investigated before the 1st of January 2007 by the TSOs and the regulators.

For day-ahead capacity rights, firm cross-border nominations shall take place sufficiently in advance before the first intraday allocation. The three regulators regard the rule of “use it or get paid for it” to be of little added value as long as market-based intraday capacity allocation is not implemented. Therefore, for the moment, the UIOLI rule will be strictly applied for day-ahead capacity rights and a common deadline for nominations shall be adopted for this product on the two borders. CRE, CREG and DTe expect the TSOs to implement this measure as soon as possible.

2.7. Harmonisation issues

CRE, CREG and DTe request the three TSOs to submit to the regulators, by the 1st of August 2006, a joint proposal for a full harmonisation of auction rules (auction times, timeframes, firmness levels, products' nominations, secondary markets, etc.) across all borders. Once approved by the three regulators, these fully harmonised auction rules will have to be operational on the two borders by the 1st January 2007.

⁵ DTe has recommended the legislator to study the possibilities of relieving the import cap for smaller parties.

⁶ The UIOLI rule is already in place on the Belgian-Dutch border.

3. DAY AHEAD MARKET COUPLING

3.1. Introduction

CRE, CREG and DTe fully support the integration of energy and transmission markets near the real time. Also, they agree that the instrument of trilateral Day Ahead Market Coupling (DAMC)⁷ could bring benefits compared to a day-ahead explicit auction mechanism.

3.2. Issues to be addressed by the operators

The three regulators request the operators of the DAMC (TSOs and power exchanges) to address in depth the following four issues in order for the regulators to examine the efficient and secure functioning of the DAMC concept.

1. The well-functioning of the trilateral DAMC algorithm. In particular, at this stage, the three regulators note that they need clear insight and description of how the algorithm works.⁸ Moreover, CRE, CREG and DTe need
 - a. information of the possibility to trade block bids under trilateral DAMC;
 - b. information on a "backup-algorithm" for extraordinary situations which the default algorithm cannot handle and in what extraordinary situations such a backup-algorithm may apply;
 - c. a sensitivity analysis of the functioning of the trilateral DAMC algorithm, especially with respect to potentially low levels of capacity available for the DAMC. This point seems particularly critical since the capacity usually available on the day-ahead market is usually very volatile.
2. The potential of generalisation of the DAMC framework to other markets, notably because of the foreseen coupling of APX and Nordpool as soon as the NorNed cable is operational;⁹
3. The demonstration of the absence of discriminatory treatment between programs nominated in the DAMC framework and those nominated in the explicit auction framework. Indeed, according to the first draft of the DAMC project, TSOs seem to accept the full financial risk of a potential reduction of the programs nominated in the DAMC framework. On the contrary, TSOs seem reluctant to accept the same risk for the programs nominated in the explicit auction framework.
4. Information regarding the implementation and operational costs of the DAMC process, as well as the way it will be financed. This condition aims to have a comprehensive cost-benefit analysis of the implementation of a DAMC in order to compare it with the application of the explicit auction framework to the day-ahead timeframe.

In addition to the above issues, the three regulators will address market monitoring and market power mitigation issues according to their respective mandate.¹⁰

As soon as the TSOs and power exchanges are able to provide full answers to the four abovementioned issues, they are invited to submit to the regulators their final completed proposal. Once submitted, a period of at least three months will be needed by the regulators in order to examine the proposal and publish their conclusions. During this transitory period, the explicit auction framework will be applied for the day-ahead timeframe.

⁷ Trilateral DAMC as defined by market coupling between Belgium, France and the Netherlands.

⁸ According to Dutch legislation, detailed descriptions of the functioning of the algorithm need to be included in the national grid code.

⁹ Scheduled for the end of 2007, beginning of 2008.

¹⁰ See also section 6.

4. CROSS-BORDER INTRADAY AND BALANCING TRADE

4.1. Advantages of cross-border intraday and balancing

The implementation of cross-border intraday and balancing was widely suggested by respondents of the consultation as a very important step for the future. Several advantages have been raised by market participants to support this implementation:

1. More flexibility to market actors;
2. Optimization of the utilization of capacities;
3. Enhancing of competition in these near real-time markets;
4. Reduction of TSOs balancing costs.

Consequently, CRE, CREG and DTe strongly support the establishment of a cross-border intraday and balancing trade and consider that all market obstacles should be removed and market and regulatory designs be made compatible as soon as possible.

CRE, CREG and DTe agree with market parties that there is no need to reserve an amount of cross-border capacity to the intraday and balancing mechanism.

4.2. Implementation of cross-border intraday trade

DTe, CREG and CRE agreed on the following features for the cross-border intraday trade:

1. It should enable both revision of day-ahead positions in case of physical disturbance and price arbitrage.
2. No particular restrictions will be imposed in terms of nomination.
3. As a first step, and for obvious operational reasons, the intraday allocation mechanism should be kept as simple as possible (example: a “first-come/first served” or a “pro-rata” method) with discrete gate closure times.
4. Capacity rights allocated in the intraday framework will be considered for mandatory use/nomination of the equivalent energy rather than offered as an option.

By the end of July 2006, the three TSOs are requested to submit a joint proposal for cross-border intraday trade, including the above features.¹¹ Once approved by the regulators, implementation of this cross-border intraday mechanism shall be effective no later than the 1st of January 2007.

4.3. Implementation of balancing trade

Regarding cross-border balancing trade, CRE, CREG and DTe have a preference for the “TSO-TSO” model (where only the TSOs are responsible for the management of cross-border balancing trade). The “TSO-TSO” model seems not only simpler (and so easier to implement), but also more secure and efficient than the “direct participation” model.

By the 1st of January 2007, the three TSOs are requested to submit a joint proposal for cross-border balancing trade based on the “TSO-TSO” model. Once approved by the regulators, implementation of this cross-border balancing scheme shall be effective no later than the 1st of July 2007.

¹¹ This proposal by the TSOs must also take into account its impact on a possible cross-border balancing market.

5. MARKET TRANSPARENCY

5.1. Market transparency

As most respondents of the consultation plead for a higher level of market transparency, CRE, CREG and DTe will publish a detailed list of transparency items by the 1st of August 2006. This list will contain a detailed, common benchmark for implementation by market participants (including TSOs) by the 1st of July 2007. Where feasible, the list will also indicate which transparency items can be implemented sooner than July 2007.

The three regulators will strive to aim for the "best practice" transparency of the three countries as a minimum benchmark. Also, this benchmark will take into account best practices mentioned by contributors of the consultation. In general, the Nord Pool transparency model was widely supported as a good basis for market transparency by respondents to the consultation.

Included in the transparency list are at least the following items regarding market information:

1. Load forecast
2. Actual consumption
3. Generation availability
4. Actual power generated
5. Actual nominations for cross-border capacity

In addition, the list of transparency items regarding TSO-activities will at least include the following items:

1. Network availability
2. (Actual) cross-border flows

CRE, CREG and DTe favour that, in principle, publication of the above mentioned data is performed by TSOs on their websites. This includes also cross-border agreements with neighbouring TSOs regarding capacity calculation (day-ahead agreements). In addition, the three TSOs shall be required to use harmonised formats and definitions.¹²

5.2. Transparency on capacity calculation

Both article 5 of the Regulation n°1228/2003 and the upcoming congestion management guidelines state that calculation of cross-border capacities must be published, after approval of Regulatory Authorities.

For this purpose, CRE, CREG and DTe consider as critical that the three TSOs start by sharing a common same set of information/forecasts regarding, in particular:

1. Best estimation of detailed generation and demand pattern;
2. Network topology and relevant characteristics at full detail;
3. Already committed transactions.

Based on this common set of information/forecast optimally updated, the three TSOs will provide, by the 1st of August 2006, a common coordinated, transparent and non-discriminatory method for the calculation of both "long term" capacities (i.e. annual and monthly timeframes) and "short term" capacities (i.e. day-ahead, intraday and balancing timeframes; hereafter: calculation method).

¹² For example: TSOs could use Excel or compatible spreadsheet formats for publication of data.

The calculation method must include rules for the sharing of available capacities on coupled interconnections.¹³ This method shall define the conditions of cooperation between TSOs for (a.o.) the optimisation of the scheduling of maintenance periods and curative cross-border re-dispatching. Once approved by the three regulators, this method shall be published by TSOs and be operational by the 1st of January 2007.

¹³ For example: where a transaction on one interconnection significantly affect the physical flows and/or possible transactions on other interconnections.

6. COOPERATION BETWEEN REGULATORS AND MARKET POWER MITIGATION

6.1. Cooperation between regulators

The three regulators anticipate that regional market integration may have important ramifications on the competitive market structure in the three countries. Given the considerable concentration in the three wholesale electricity markets, especially in the Belgian and French markets, efforts to integrate these markets require harmonisation, extension of the scope of market monitoring activities and possibilities to address market power issues from a more (relevant) regional perspective.

The three regulators note that, in order to cooperate in line with article 23 of the Directive 2003/54, they need to be adequately mandated to monitor, supervise and regulate the market across their national borders. For example, the three regulators find that under national legislation, not all regulators are equally mandated to share confidential information of their national market parties with regulators in other countries. In the case of implementation of market coupling, the three regulators consider this issue will become more acute.

As announced in section 2, by the 1st of January 2006, the three regulators will set up a joint taskforce for monitoring vital aspects of the three wholesale electricity markets (e.g. the explicit auction mechanism, power exchanges, balancing markets).

As a first step, the three regulators will particularly focus on the functioning of the explicit auction mechanism and, more specifically, on the following dimensions:

1. the capacity allocation process (how do bidders behave?);
2. the capacity rights' nomination (how do capacity holders behave?);
3. the calculation of cross-border transmission capacities (how do TSOs behave?).

An annual report will be published to give feedback to market participants on the functioning of explicit auction methods.

6.2. Market power mitigation measures

In addition to the above, further regional market integration may also require specific market power mitigation measures. The three regulators are concerned of the increased risk that dominant market parties¹⁴ could abuse their market power on the regionally integrated market. This potential abuse of market power might even overturn the potential advantages of DAMC. This may have a negative impact on economic welfare, wholesale market liquidity and investor confidence on the wholesale electricity market.¹⁵

The three regulators will further examine the abovementioned market power concerns.

6.3. Backup procedure

The three regulators agree that a possible decision to approve the implementation of the DAMC process shall only be considered as temporary. The decision to continue the DAMC mechanism on the Belgian, French and Dutch markets will be made pending the outcome of a periodic audit by the three regulators in order to evaluate whether DAMC really brings the expected benefits.

¹⁴ Especially those dominant market parties with positions in more than one of the three markets.

¹⁵ This applies mainly to the Dutch wholesale electricity market, where the current level of market concentration is lower than in a fully integrated Dutch-Belgian market.

The possibility that DAMC may not be continued (either because of bad functioning of the algorithm or because of increasingly difficult market power issues) requires TSOs to have at their disposal a rapidly operational alternative method (i.e. a “fall-back” scenario) compliant with the Regulation n°1228/2003 (i.e. day-ahead explicit auctions).

Therefore, the regulators expect the TSOs, prior to a possible temporary decision to approve the DAMC process, to develop such a backup procedure and to submit it for approval by the regulators.

7. IMPLEMENTATION OF RECOMMENDATIONS

The following table gives an overview of the recommendations, including timing, to be implemented by TSOs, regulators and/or other (market) parties.

| Date | To be implemented / concluded | Action point |
|-------------------------|--|--------------|
| December 2005 | Publication by the TSOs of the minimum of the yearly, monthly and daily capacities to be allocated for the following year on the Belgium-French and Belgium-Netherlands borders | 1 |
| 1 January 2006 | Sealed bids explicit auctions at marginal price for the annual, monthly and day-ahead timeframes will be implemented on the Belgian-French and the Belgian-Dutch borders. | 2 |
| | Implementation by the regulators of a joint monitoring taskforce | 3 |
| 1 April 2006 | Proposal by the three TSOs for secondary trading | 4 |
| 1 July 2006 | Regulators investigate opportunity of multi-annual and quarterly allocation | 5 |
| | Implementation by the three TSOs of secondary trading | 6 |
| 1 August 2006 | Proposal by the three TSOs for harmonisation of auction rules | 7 |
| | Proposal by the three TSOs for cross border intraday trade | 8 |
| | Proposal by the three TSOs for a common calculation of cross-border capacities | 9 |
| | Regulators publication of detailed list of transparency items | 10 |
| 1 September 2006 | Investigation by the regulators into multi-stage quarterly and annual allocation | 11 |
| | Publication by the TSOs of the minimum of the yearly, monthly and daily capacities to be allocated for the following year on the Belgium-French and Belgium-Netherlands borders | 12 |
| 1 October 2006 | Implementation of multi-stage annual auction by the three TSOs | 13 |
| 1 November 2006 | Proposal by the three TSOs for a full harmonization of auction rules | 14 |
| 1 January 2007 | Investigation by the TSOs and the regulators of the "use it or get paid for it" rule | 15 |
| | Presentation by the TSOs of possibility to implement a centralised trading platform for secondary trading | 16 |
| | Implementation of fully harmonized rules between the Belgian-French and the Belgium-Netherlands borders by the TSOs, including a common definition of "Force Majeure" and a calculation method for cross-border capacities | 17 |
| | Implementation of cross-border intraday trade | 18 |
| | Proposal by the three TSOs for cross-border balancing | 19 |
| | Implementation of cross-border balancing trade | 20 |
| 1 July 2007 | Implementation of benchmark list for transparency by market participants | 21 |