



Second ERI Coherence and Convergence Report

An ERGEG Conclusions Paper

**Ref: E08-ERI-19-04
11 March 2009**

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1 INTRODUCTION

1.1 Background and purpose of this paper

On 16 September 2008, ERGEG launched a public consultation on the second report on coherence and convergence across the seven Regional Energy Markets (REMs) of the Electricity Regional Initiative (ERI) and the convergence to a single market in due course. The report provided an overview of the progress within the REMs, which were established in order to accelerate electricity market integration at regional level. In the report, ERGEG invited stakeholders to answer specific questions and to provide their own view on the progress achieved.

This paper provides a summary of the responses received to the specific questions as well as the general feedback from the stakeholders participating in the public consultation.

1.2 Recap of ERGEG public consultation

The second ERGEG ERI Coherence and Convergence Report gives an overview of the progress made by each REM and identifies obstacles towards the implementation of the congestion management target mechanism encountered by each REM and also on transparency and balancing issues.

It emerges that each REM encountered similar kinds of obstacles when fostering regional integration: differences in market design, the number of parties involved, the lack of incentives, and the lack of coordination between regions are often given as explanations for delays in implementing the action plans set out by regulators and stakeholders.

Progress on implementing the congestion management target mechanisms should be achieved soon through improving cross-regional coordination. ERGEG proposed some ways to foster coherence of actions taken at regional level and overall convergence in the consultation document.

1.2.1 Capacity calculation

It is of utmost importance that TSOs begin to “use of a common transmission model dealing efficiently with interdependent physical loop-flows and having regard to discrepancies between physical and commercial flows”. These common transmission models, usually developed at regional level, should be compatible among regions.

It is also necessary to improve the coordination of information exchanges between TSOs and from generators to TSOs. In addition, more detailed information on the capacity calculation methodologies used should be made available to regulators and market participants.

Whilst essential, coordination between TSOs (which is mandatory according to the Congestion Management Guidelines) is not sufficient to guarantee the maximisation of cross-border capacity. Tighter coordination must be complemented by specific schemes providing TSOs with incentives to maximise cross-border capacity. ERGEG is currently working on this incentive issue with the aim of proposing adequate incentives for TSOs to foster market integration.

1.2.2 Long-term allocation

Whilst some obstacles have been identified towards the implementation of a common auction platform and the creation of common auction rules for long- and medium-term capacity allocations, these do not seem to be insurmountable. Harmonisation of auction rules for long-term capacity should, therefore, be put as top priority for all regions. Regions which have already engaged in the process of harmonising different sets of auction rules should continue to do this.

Alongside the harmonisation of rules and procedures, regions should work to improve auction rules. In this context, further improvements are advocated for the development of efficient secondary capacity markets and firmness of capacity rights. Firmness is an important prerequisite to the development of cross-border trade, competition and market integration. ERGEG is currently working on this regulatory issue with the aim of finding a homogeneous solution on a European level.

The next step is, therefore, to ensure the compatibility of efficient regional auction platforms and rules at reasonable cost for European users. In this respect, the potential extension of the geographic scope of the already established and currently planned platforms to include additional interconnections is conceivable.

1.2.3 Day-ahead allocation

The development of day-ahead market coupling mechanisms is currently ongoing in several regions. However, for the creation of the internal electricity market it becomes de facto a multi-regional issue, which is challenging from both a technical (how can overlapping countries be involved in more than one coupling project?) and organisational (what projects should be prioritised?) perspective. In this context, the question of how to coordinate existing market coupling projects should be considered.

Studies to gauge socio-economic gains from switching to implicit auctions, such as the one carried out in the Central South (CS) region, can help to highlight the advantages and difficulties borne from extending market coupling mechanism to all European borders. An external independent consultant could evaluate the costs/benefits of extending market coupling on each European border.

Based on such a study, a cross-regional plan for the implementation of market coupling (including a clear timetable) could be defined and approved at a high level. Other criteria such as, feasibility, already undertaken works and developments in National legislation must be considered. Such a roadmap would be monitored by ERGEG and the European Commission. It could provide the ERI with added value in terms of arbitration and coordination of the market coupling projects. The ERI proposes to work closely with the Project Coordination Group in this area, as they have a similar remit.

1.2.4 Intraday

Intraday markets (national and cross-border) are important means for enabling market participants to balance their positions in the timeframe after day-ahead markets and before balancing in the operational hour. With the exception of the Baltic region, intraday markets are under discussion in all ERI regions. However, the level of actual implementation or implementation planning differs. The ongoing discussions show that the establishment of this type of market depends to a large extent on the market designs already implemented. The methods currently studied in the Central West (CW) region primarily rely on an implicit allocation based on continuous trading. The way to organise this, on regional or a multinational scale, must be defined.

The main reason for delays in implementing efficient solutions for intraday allocation is that longer-term allocations and day-ahead allocations (e.g. market coupling projects) are given higher priority than intraday market development.

Ensuring compatibility of the schemes to be elaborated on a regional level remains a challenge within the Electricity Regional Initiative.

1.2.5 Balancing

While it has been defined as a priority topic within each ERI, there are currently very few regions addressing balancing.

This could be seen as surprising given that integrating balancing markets would increase system security. Indeed, the rapid change in the generation pattern (with the development of wind power in particular), together with the difficulty to invest in transmission infrastructure, should provide an incentive to accelerate the integration of balancing markets. Additionally, such balancing market integration could help TSOs and regulators to reduce the cost of re-dispatching actions to ensure stability of the network, as well as the quality of access to the transmission network.

1.2.6 Transparency

Almost all Electricity REMs already have or are on about to produce a regional transparency report. All these regional transparency reports are based on the same model (the first transparency report produced by the Northern REM), but have been progressively improved and/or adapted to the specificities of each regional market. With all these transparency reports, there is the possibility of fine-tuning transparency requirements at an ERGEG level through the review of the ERGEG Guidelines of Good Practice for Information Management and Transparency in Electricity Markets (GGP-IMT). The requirements not yet included in the Congestion Management Guidelines should be made legally binding.

2 Responses received

The ERGEG consultation closed on 11 November 2008; 18 responses were received. Table 1 lists the respondents. All responses are non-confidential and have been published on the ERGEG website¹. ERGEG would like to thank all these organisations for their valuable contribution towards coherence and convergence issues in the electricity market.

| Respondents | | Country |
|--------------------------------|---|--------------------|
| Centrica | Energy company | UK |
| CEZ | Czech electricity company | Czech Republic |
| EEX and Powernext | Power exchanges | France/Germany |
| EFET | European Federation of Energy Traders | EU |
| EFET Iberian Task Force | European Federation of Energy Traders | Iberian Task Force |
| EnBW | Energy company | Germany |
| E.ON | Energy company | Germany |
| ETSO | TSO Association | EU |
| EURELECTRIC | Union of the Electricity Industry | EU |
| Gas Natural | Spanish electricity producer | Spain |
| GEODE | Association of European independent distribution companies of gas and electricity | EU |
| IFIEC | Consumer Association | EU |
| Nordenergi | Nordic Energy Industry Association | Nordic |
| NWEMPP | North-West Energy Industry Association | North-West Europe |
| RWE Supply and Trading | Energy company | Germany |
| SEE | Scottish and Southern Energy | Scottish |
| UNESA | Spanish electricity Association | Spain |
| VERBUND APG | TSO | Austria |

A summary of all responses received is included in [Appendix A](#).

3 Insight from the public consultation and ERGEG views

3.1 General comments

The European Electricity Regional Initiative is reaching an important stage where significant progress has been made in the workstreams and projects initially identified and the regions are now beginning to consider the next steps of harmonisation. An initial comment on the responses received to the consultation on the Coherence and Convergence report is that stakeholder interest in the ERI is still very much evident as we approach this important stage, with an increase in the number of responses from last year. Almost all respondents welcomed the opportunity to contribute and emphasised their support of continued harmonisation and the creation of a single European electricity market.

¹ http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_CONSULT/CLOSED%20PUBLIC%20CONSULTATIONS/ELECTRICITY/2008%20ERI%20Coherence%20and%20Convergence/RR

The responses typically fell into two broad categories, with a few respondents choosing to comment on issues specific to their region but most commenting on issues that affect the whole EU. In some ways, this is an indication that harmonisation progress is being made. Stakeholders now seem less concerned with small project delays in their region or issues surrounding a particular interconnection and are now starting to think on a larger scale. Simply put, respondents are now starting to consider the benefits of intra-regional and inter-regional integration.

The majority of respondents were keen to see an increase in co-ordination between Electricity REMs. There is some concern that given different starting positions, differing levels of progress and a lack of communication between regions, achieving common practices and methods across all regions is being neglected. Various solutions to this were posed including a greater role for member states operating in multiple regions (SSE), the creation of a pan-European harmonisation framework (RWE) and the use of more of a top-down approach (Nordenergi). In recognition of these concerns, ERGEG launched a new Regional Initiative Group in 2009, which will include in its remit an objective to promote inter-regional harmonisation.

Another option to achieving harmonisation over a greater area than the current seven regions is to review the boundaries of the existing regions. With greater interconnection built or planned in many areas of Europe, the suggestion is that the scope of the regions could be increased. This suggestion is made by Centrica and ETSO. This will be an issue for discussion in the particular regions concerned.

There appears to be varying views about how best to project-manage further harmonisation in the ERI. There are calls for more milestones and timeframes for progress (Nordenergi) in each region separately and also implementation of critical steps to harmonisation to be enforced in all regions. Similarly, differences of opinion exist on how best information should be shared in the initiative, including co-operation between regional exchanges (EEX/Powernext) and the creation of an EU regulator memorandum of understanding (Centrica).

The various views on the relevant issues expressed by different stakeholders can be taken as a sign that significant differences in the EU electricity markets and on governance issues remain. While some methods may work well in some areas, they may be less effective in others where geographical, institutional or technical differences exist. However, the enthusiasm of parties involved, the progress made to date and the continued inventive thinking on how to address issues in the European electricity markets would suggest that considerable improvements in harmonisation can still be made within the ERI.

3.2 Capacity calculation

Some respondents made specific comments concerning capacity calculation. These comments varied considerably, depending on the region and the type of stakeholder. Most of the respondents support the developments made concerning the calculation of cross-border capacity and the increased coordination.

E.ON indicated a lack of transparency in the allocation process and the need for a simulation tool for better understanding of the possible outcomes.

Several respondents indicated their support for the development of a common methodology, a common calculation model or common principles for capacity calculation at a regional level or even at European level.

VERBUND APG indicated that for highly-meshed grids, as for instance in the centre of Europe or in the South-East area, a flow-based approach is urgently needed to optimise regional trading opportunities and at the same time allow for secure grid operation.

Eurelectric and EFET indicated that the exchange of data between TSOs required for the calculation should not be limited to grid topology and load forecast but should also include a reasonable view of the likely dispatch of power plants. EFET also indicated that this exchange of data should be based on up-to-date data. ETSO mentioned that the common transmission model in D-2 can only be founded on best estimates when it concerns load and generation.

Several respondents indicated the importance of maximising cross-border capacity offered to the market (IFIEC, EnBW, EURELECTRIC, EFET). Verbund reported that, concerning the amount of proposed capacity, there is always a trade-off between the capacity made available for trading and the security of grid operation. If a flow-based approach is introduced to avoid critical situations, it should be clear that in these critical situations we cannot have both: more security and more capacity.

VERBUND APG and Eurelectric underlined that the impact of DC interconnectors must also be taken into account: although it is possible for a TSO to “control” the flow through such an interconnector, each DC flow eventually influences the other AC flows in a meshed network. These respondents insisted on the importance of an appropriate treatment of these interconnectors that should be based, as far as possible, on the same principles. This issue is especially important with the future development of a number of DC interconnectors. On the same issue, ETSO indicated that, following current practices, internal transmission network congestion never affects the capacity of some DC interconnectors.

IFIEC, EFET, VERBUND APG indicated that flow-based capacity calculations may lead to internal congestion being shifted to the borders, thus reducing available cross-border capacity. Therefore, it was proposed that the methodology should include flows on all key tie-lines and envisage the possibility of declared congestion even on lines inside national grids.

More specifically, concerning the Central-West region, several respondents indicated that they were disappointed by the fact that optimal capacity calculation methods on paper may not produce sufficient commercial opportunities in practice.

3.3 Long- and medium-term capacity allocations

Stakeholders expressed their support for harmonisation of the terms and rules for allocation of long-term transmission rights. In this respect, stakeholders welcomed the establishment of auction offices in the Central-West and Central-East regions and encouraged other regions to speed up progress on similar projects.

Some stakeholders, however, expressed concern in terms of the coherence and convergence of approaches taken by different initiatives, especially with respect to the perimeter of activities of auction offices and auction rules (EURELECTRIC, EFET).

In order to ensure truly convergent rules and compatibility of platforms, some respondents called for additional efforts towards the harmonisation of essential features across the EU. In particular, stakeholders suggested that pan-European decisions should be taken with regard to duration of products, firmness of capacity rights, use-it-or-sell-it (UIOSI) mechanisms, secondary nomination platforms and facilitating secondary trading of transmission rights.

EnBW, EURELECTRIC, EFET stressed the need for transmission rights products to match profiles and maturity typically exchanged on wholesale energy markets. This would imply access to capacity over multiple timeframes, including multi-year dimensions in order to allow market participants to hedge their long-term positions.

Firmness of capacity rights also drew substantial attention from respondents. Users called for firmness to be enhanced and harmonised on European borders. TSOs stressed the need for an unambiguous agreed methodology to finance compensations in case of curtailments.

Stakeholders also invited the initiatives to converge on best practices for secondary capacity trades (different platforms to converge on IT solutions preferred by market players) and on UIOSI mechanisms.

3.4 Day-ahead allocation

The report states that moving toward day-ahead implicit auctions (market coupling or market splitting) is the “natural trend” due to the obvious net benefits from better utilisation of transmission lines in accordance with the signals from the wholesale market. The report reviews the status of the various regions moving towards this goal. In some regions, the crucial precondition of liquid wholesale markets offering credible reference prices is not yet met. Therefore, the development of coordinated explicit auctions is still the pragmatic approach of these regions.

It is obvious that the compatibility requirements increase when moving from explicit to implicit auctions. These relate to “formalities” on bidding, gate closure etc. as well as to the range of “bidding-products” offered and governance structures.

The case of overlapping regions provides a case for coordinating the work between regions. In addition, the lack of commitment in certain regions constitutes a barrier to development, which also relates to the need to establish new, joint governance bodies. Regulators are important catalysts to promote this development, but the support and cooperation of both the Commission and of national energy authorities (governmental bodies) is equally important.

Generally, a stepwise approach is regarded as the only pragmatic way forward – both for intra-regional integration and for subsequent integration between regions. However, this way of progressing requires that solutions are flexible in order to adapt to subsequent stages of integration. This requirement also relates to the IT-solutions chosen.

The views expressed a desire to move towards day-ahead implicit auctions in all regions – and finally on a European scale, stressing the need for careful design and testing before implementing any market coupling solution. This, to some degree, makes it difficult to progress faster – a request of many stakeholders. Some (E.ON, EURELECTRIC, Nordenergi, NWEMPP) propose to solve this dilemma by accepting “second-best solutions” for a transitional period, e.g. by starting market coupling with ATC/NTC² based capacity calculations, whilst ultimately heading towards flow-based market coupling. Also, where well-developed liquid markets are lacking, day-ahead explicit auctions must be accepted until this important precondition is met.

The degree of compatibility needed between regions to become coupled is addressed in a number of responses. It is evident that the harmonisation of a number of basic features is a precondition. Also the compatibility of features of different market models should be taken into account. However, total harmonisation should not be necessary – at least for an intermediate period. Dome coupling³ might offer a solution at this step (E.ON, EnBW). Other responses (EEX/Powernext, EURELECTRIC) call for an analysis of dome coupling versus alternative solutions providing horizontal integration.

Also the relationship between day-ahead implicit auctions and longer-term capacity reservations is addressed. There seems to be convergence towards longer-term financial capacity reservations (EURELECTRIC, EFET, Nordenergi, NWEMPP, GN) contributing to appropriate hedging opportunities, which means that the entire NTC can be “coupled” day-ahead.

Most responses focus on interconnections between countries. However, one response (VERBUND APG) stressed the need to also address congestion within countries. Such congestion might require for separate price areas (bidding areas) as well.

The issue of transparency in market coupling solutions is touched upon by some and one respondent (EFET) explicitly calls for algorithms to become publicly available.

A number of responses explicitly support ERGEG’s proposal to establish a “cross regional road-map” (Centrica, EURELECTRIC, RWE). In addition, other responses seem to implicitly support the proposal. The proposal to analyse the costs/benefits of market coupling between regions by way of an independent consultant seems not to be addressed by anyone.

3.5 Intraday

Intraday markets (national and cross-border) are important means for enabling market participants to balance their positions in the timeframe after day-ahead markets and before balancing in the operational hour.

² Available transfer capacity / net transfer capacity.

³ Dome coupling: a loose form of market coupling whereby diverse regions are coupled by an overarching mechanism.

On this topic, most of the stakeholders recalled their opinions and stated that intraday trading is important for them. However, it is accepted that it should be given a lower priority than daily or long-term allocations.

Most stakeholders agree that, for the intraday timeframe, continuous free of charge allocation on a first-come-first-served basis is the best solution. They agree as well that intraday markets should be designed to allow over-the-counter (OTC) trade.

Some answers claim that differences in market design constitute an obstacle. Intraday energy markets usually have important differences that make trading energy between one system and another difficult in the intraday timeframe.

EREG welcomes the interest in intraday trading and believes that it can contribute to regional integration. Currently there are several borders where intraday allocation is either continuous or auction-based. Even though both are allowed under the Congestion Management Guidelines, regulators should define in detail the criteria that a target method should comply with from a regulatory point of view. Additionally, whatever the selected method is, the important differences in intraday energy market design across systems must be tackled. Probably, harmonisation of timing (at least) would be needed.

3.6 Balancing

All consultation respondents except VERBUND APG support the statement that cross-border capacity should not be reserved for balancing purposes, as the focus should firstly be on the maximisation of available capacity for the market. VERBUND APG asks for EREG advice to treat this problem effectively.

All respondents welcome the report's recommendations on developing cross-border balancing with the goal to integrate balancing markets. EURELECTRIC recommends reaching agreement on a target model, identifying pilot areas where rapid progress is possible (where there is already sufficient harmonisation) and initiating these pilot projects in 2010. They express the need to develop a common prequalification methodology to aim for full integration.

EURELECTRIC and IFIEC support, as a first step, the TSO-TSO model being implemented for cross-border balancing integration. TSOs should manage these trades within the limit of the capacity available after gate closure of intraday or day-ahead markets. Most respondents express their interest in the implementation of harmonised cross-border day-ahead and intraday trade before a cross-border balancing solution.

E.ON remarks that intraday markets will provide market participants with more tools for balancing and will leave TSOs with smaller imbalances to manage. As a result balancing markets could be a residual feature of intraday markets.

ETSO provides regional comments. They perceive, in the France, UK, Ireland (FUI) region, that paying for the use of interconnector infrastructure is a potential obstacle to further balancing market integration. ETSO underlines the need for improvements, in the South East region on a national level, as some balancing markets rules are not market-based, before harmonisation of actions and integration.

They welcome, as well as Gas Natural, the analysis for balancing perimeters that has been proposed in the South West region. ETSO also mentioned the work currently ongoing to identify barriers to cross-border access to balancing markets and the model to be implemented in this region. SSE mentioned SEM⁴ day-ahead market design (single gate closure) as a restriction on market participants' access to cross-border balancing services.

3.7 Transparency

The importance of improvements in transparency was stressed by almost all contributors. Many of the contributors stressed the need for improved and harmonised market transparency in order to create a level playing field. Equal transparency requirements in either coupled markets or neighbouring countries was seen as a very important issue by Nordenergy, Geode and EURELECTRIC. There were several reasons mentioned, such as an equal treatment of market players in all markets in order to avoid potential arbitrage advantages of one trading party over another. Also the aspect of market power was raised.

Many comments (IFIEC, EURELECTRIC, Centrica, EEX/Powernext, Nordenergi, NWEMPP) welcomed the regional approach established by the Transparency Reports in the Northern, Central West and Central East regions.

It was clearly mentioned that a standardised approach is needed. While E.ON stated that regional deviations of the Transparency Reports should be avoided in order to ensure a European approach, ETSO stated that in some cases the regional characteristics of the Transparency Reports are not sufficient to address regional differences.

EnBW stated the need for harmonised rules within and between different Electricity REMs, but suggested a stepwise approach because of different conditions in each region.

GEODE stressed a need for the implementation of guidelines of good practice and EURELECTRIC asked for a European harmonised list of fundamental data, which was sufficiently detailed and complete.

The need to harmonise definitions, uniform formats, common language and internet based publication requirement raised by many contributions (RWE, GEODE, IFIEC, EnBW, E.ON, EURELECTRIC, EFET). IFIEC stated that transparency requirements should be well-balanced in order to include necessary data, but also to ensure that requirements are not too far-reaching.

⁴ SEM – Single Electricity Market – a joint pool market implemented in Ireland and Northern Ireland.

Several comments gave special consideration to the harmonisation of gate closure times and generation plant scheduling. It was also proposed by E.ON that a minimum list of generation data should be available. GN Spain stressed the need for more transparency on the calculation of cross-border capacity. It was suggested to periodically publish monthly and yearly forecasts, as well as data used for NTC capacity calculation. Finally, a common calculation model for the available transmission capacity for each synchronous area, which also takes into account information on adjacent synchronous areas, should be implemented, according to EFET.

With regard to the location of published information, EEX and Powernext stressed the advantage of providing a neutral platform for the market participants and the TSOs on which data can be published. Regardless of the location of publication, it was mentioned that timely submission of the information and further improvements in quality of the data is needed.

EFET suggested that regulators take responsibility for the development of a process for the exchange of information between TSOs relating to grid topology, location of load and anticipated location of generation.

In conclusion, ERGEG has been and still is committed to reach harmonised transparency of fundamental data in Europe. After drafting the Guidelines of Good Practice on Information Management and Transparency, further harmonisation of transparency was achieved in the regional Transparency reports. Here, differences in the regional electricity markets could also be addressed. However, with regard to the main requirements, there are no major differences in the regional Transparency reports of the regions Northern Europe, Central Western Europe, Central Eastern Europe, South West Europe and Central Southern Europe. Therefore, the harmonisation of transparency requirements is quite high. From ERGEG's point of view, all regional initiatives should adopt the approach of starting the implementation of the transparency requirements by publishing a Transparency Report.

ERGEG will discuss whether further harmonisation in the medium-term will be necessary, e.g. by developing a European Transparency report. Currently, the regions concentrate on monitoring the implementation of the existing regional Transparency reports.

4 The way forward

The outcome of the public consultation on the second ERI Coherence and Convergence report reiterates that the ERGEG ERI process allows regions to make concrete progress on the move towards a single electricity market.

Stakeholders outlined the current obstacles that exist in the implementation of the target congestion management mechanism, which were broadly covered in the report - topic by topic and region by region. Stakeholders also highlighted that regions are advancing at different speeds in relation to proposals and implementation of different measures and these differences must be considered.

Stakeholders support the report's conclusions and recommendations for **greater coordination**, in order to achieve more convergence in the planned and ongoing projects in the different regions. ERGEG is aware of this need. To ensure greater convergence, in 2009 ERGEG established the **Regional Initiatives Group**, which will work to improve the operational performance of the RIs by increasing the level of co-ordination between them, exploring potential synergies and raising their public profile.

As regards **capacity calculation**, taking into account the developments made during the last years and the responses received, ERGEG considers that the capacity calculation methods must be at least compatible, especially in the UCTE area, where there is a single, highly-meshed network. In addition, there are common criteria that should be followed: interconnection capacity must be maximised⁵ while respecting the security standards; the methodology should be public, clear and transparent; the different methodologies should have common grounds, should be compatible and aim for a broad common transmission model; the exchange of data between TSOs must be optimised; and the results of the calculations should be as predictable as possible.

The advice to develop a process for **exchange information between TSOs** will be subject to ERGEG's review.

Stakeholders fully support the elaboration of cross-regional action plans addressing the identified obstacles to the implementation of the congestion management "target methods" especially on long-term and day-ahead timeframes.

For this purpose, and as suggested at the XVth Florence Forum, ERGEG has established a Project Coordination Group of experts, with participants from the European Commission, Regulators, ETSO, Europex, EURELECTRIC and EFET, involving Member States' representatives as appropriate, charged with developing a practical and achievable model to implement cross-border electricity trade across the regions and to propose a roadmap with concrete measures and a detailed timeframe, taking into account progress achieved in the ERGEG ERI. The Project Group will begin with the day-ahead issue and build a picture of the entire framework. Initial outcomes of this work will be presented at the next Florence Forum (June 2009). The work of the PCG will continue beyond the next Forum.

In the meantime, ERGEG encourages each REM to complete their action plans, involving all parties, explaining the remedies that could support the implementation of the target mechanisms for each obstacle identified.

Furthermore, the remarks on the need to harmonise some aspects, such as gate closure times were helpful. This issue will be addressed within the ERGEG discussion on how to integrate the markets and the creation of a coordinated model for regional and inter-regional congestion management as foreseen by the XVth Florence Forum. Within the Project Coordination Group of experts this issue may be discussed.

For **long-term** capacity allocation, the next step is to ensure the compatibility of efficient regional auction platforms and rules at a reasonable cost to European users. Within each region, integration should be embraced, bearing in mind the final objective of harmonised and unified auction platforms (harmonised set of auction rules and a single interface for market players) across different regions. In this respect, the different regional platforms may eventually be merged. Prior to that, these platforms should reach more maturity and the auction rules should be sufficiently consistent.

⁵ For this purpose, TSOs should identify the limiting constraints and take steps to increase the level of interconnection capacity.

Intraday allocation is a second-level priority. ERGEG welcomes the interest in intraday trading and believes that it can contribute to regional integration. Currently, there are several borders where intraday allocations are either continuous or auction-based. Even though both are allowed under the Congestion Management Guidelines, regulators should define in detail the criteria that a target method should comply with from a regulatory point of view. Additionally, whatever the selected method is, the important differences in intraday energy market design across systems must be tackled. It is likely that harmonisation of timing (at least) would be needed.

Balancing market integration will help to reduce balancing costs and to improve system security. It is clear that most regions are still not focusing on balancing and neither will stakeholders until day-ahead integration is solved. However, the starting projects may serve as a basis for a further agreement on a target model.

Finally, on **transparency**, ERGEG will discuss whether further harmonisation will be necessary in the medium-term, e.g. by developing a European Transparency report. Currently, the ERGEG Regional Initiatives concentrate on monitoring of the implementation of the existing regional Transparency Reports.

Appendix A: Summary of comments received

4.1 General comments

| Issue | Who |
|---|---|
| Supports ERGEG's Electricity Regional Initiative (ERI) of market integration at regional level as an interim step to facilitate the completion of the single European electricity market. Welcome the progress made in the ERI in facilitating cross-border trade. | GEODE, IFIEC, Gas Natural, E.ON, Centrica, EFET, SSE, EnBW, ETSO EURELECTRIC |
| The consultation paper gives very good overview of the actual situation / a useful and impartial summary of recent achievements and current obstacles / it is a useful tool. | CEZ, RWE, E.ON, EnBW, EURELECTRIC |
| Support the approach for more coordination / Support the definition of a roadmap to coordinate the different regional projects at an inter-regional level / Support ERGEG proposals to encourage each REM to elaborate action plans that identify obstacles towards the implementation of the congestion management target mechanisms. | RWE, GEODE, IFIEC, EnBW, Gas Natural, E.ON, ETSO, EURELECTRIC, Centrica |
| The several regions are advancing at different speeds regarding proposals and implementation of different measures. | RWE, IFIEC, EnBW, Gas Natural, EURELECTRIC, EFE |
| It is essential that the inter-regional market integration process can tolerate some differences in market design. | E.ON, Centrica |
| The roadmap should classify the different regional initiatives, assess their importance and likelihood of success, as well as their compatibility with other ERI. | EnBW |
| This should be done in a way that does not stop the dynamics of ongoing projects. | EnBW, IFIEC |
| Solution to accelerate progress is therefore to give priority, not to certain regions or interconnection projects, but to establishing common market features that will clearly promote greater flows of trade, such as transparency standards, timing, auction systems, auctions rules and intraday trading mechanisms. | E.ON |
| Regions should learn from experiences in other regions and follow similar, converging paths or even leap frog other regions. | EURELECTRIC, Centrica |
| Suggest a new definition of the geographical areas covered by the regional markets depending on the priorities and their progress. | ETSO, Centrica, VERBUND APG |
| EnBW agrees with ERGEG that due to limited resources a prioritisation of the various projects is needed to ensure fast progress. In this context we would also like to mention the still unclear refinance situation of the costs arising for stakeholders involved in these projects. | EnBW |
| Care is needed to be sure that the developments in the different regions are compatible, so as to facilitate integration not only within regions (in the short-term) but also between neighbouring regions (in the medium term), and ultimately to create an integrated European market. | IFIEC |
| Missing SEE region and progress made by several regions over | ETSO |

| Issue | Who |
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| summer 2008. | |

4.2 Capacity calculation

| Issue | Who |
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| The capacity offered to the market participants must be maximised, in line with the requirements of Art. 6(3) of Regulation 1228/2003. | IFIEC, EnBW, EURELECTRIC, EFET |
| Need to coordinate different ways to calculate capacity across-borders and regions. A common methodology is a more efficient approach. | GEODE, EnBW, IFIEC, Gas Natural, RWE, EURELECTRIC |
| The hypotheses and data used for the calculation should be published, as well as the limiting constraints and critical contingencies. | Gas Natural, E.ON |
| The market has little understanding of the components of flow-based algorithms and, crucially, what the effect will be on prices. ERGEG is the appropriate organisation to ensure that commercial trading parties are given access to examples of capacity models. | E.ON |
| Important to pay much more attention to developing a process for the exchange of information between TSOs, not only regarding grid topology, but also about the location of load and anticipated location of generation. | EURELECTRIC, EFET |
| For highly meshed grids, a flow-based approach is urgently needed to optimise regional trading opportunities and at the same time allow for secure grid operation. | VERBUND APG |
| The major advantage of a flow-based methodology is that it indicates automatically the most congested and critical elements in the whole region as a result of the trading behaviour of market participants, independently of the settings of the individual TSOs. | VERBUND APG |
| Congestion management can never create additional capacity, this can only be achieved by additional investment in new lines or improving existing lines. | VERBUND APG |
| In CW region, TSOs found that the results of simulating a flow-based method were not satisfactory. | EFET, IFIEC, E.ON, EURELECTRIC |
| In the CEE region the flow-based method is, nonetheless, planned to be implemented for yearly, monthly and daily auctions, without apparent heed as to whether between some countries the available cross-border capacity will increase or decrease and without any evaluation of consequences for wholesale level international competition. | EFET |
| Flow-based capacity calculation and allocation may be technically difficult and may lead to internal congestion being shifted to the borders, thus reducing the cross-border capacity available. | IFIEC, EFET, VERBUND APG |
| To fulfil the Guidelines request would mean to auction line capacity within a Member State or to find other solutions, e.g. by introducing different price zones in a country which reflect the actual congestion. | VERBUND APG |
| FBMC should not be brought to the market until it can be proven that | E.ON, IFIEC, EFET, |

| Issue | Who |
|---|--------------------------|
| it will provide at least as much capacity for sale as is available at present, and in a way that is sufficiently transparent for market parties to understand the methodology. | EURELECTRIC |
| The missing/imprecise information about generation and load constitutes another obstacle to implement FB approach. Consequently the common transmission model at D-2 can only be founded on best estimations. | ETSO |
| Other instruments, like counter trading and re-dispatching, should be considered as effective means to increase the cross-border capacity made available to the market. | IFIEC |
| Merchant line/DC lines should definitely be included in a system of coordinated capacity definition and a coordinated system of re-dispatch/counter trading, as these measures may be triggered by flows caused by these lines. | VERBUND APG, EURELECTRIC |
| To remove congestion, more grid investments, especially, but not exclusively, in cross-border capacity is needed. | IFIEC, Gas Natural |
| To identify the necessary capacity expansion, a coordinated medium-term investment plan should be drawn up jointly by the TSO's in every region. As basis for such a coordinated investment plan, TSOs need to develop a common transmission model. | IFIEC |
| Regulators need to provide system operators with incentives to optimise the build, maintenance and operation of cross-border transmission. | RWE, Gas Natural, E.ON |
| A regional system operator (RSO) to solve the problem of managing the different European transmission systems. | GEODE |
| IFIEC is convinced that an independent European System Operator (ESO) as a trustworthy observer can propose and promote grid reinforcements and align operational procedures to better integrate the markets and guarantee system security. | IFIEC |
| FUI region: pancaking of charges at the boundaries of National Grid tariff's zone gives perverse trading signals. | SSE |

4.3 Medium and long-term allocation

| Issue | Who |
|--|-------------------------|
| Stress the need for harmonisation of auction rules and compatibility of different auction methods and auction platforms between regions. | All respondents |
| Support financially firm transmission rights when market coupling is in place. | RWE, Nordenergi, NWEMPP |
| The focus should be first on determining the important product features including duration of products, firmness of the capacity rights, and possibility for secondary nomination. | EnBW, EURELECTRIC, EFET |
| There is a clear need for long-term transmission rights. The purchase of cross-border capacity for longer time periods must be possible (multiyear). | IFIEC, EnBW, EFET |
| Firmness of capacity rights is an important issue for market participants, as otherwise they would have to bear unmanageable risks in case of | EnBW, Gas Natural, |

| Issue | Who |
|---|---|
| curtailment. Except in case of force majeure, compensation for any curtailment could be at full market spread. | EURELECTRIC, EFET |
| The use-it-or-sell-it mechanism (UIOSI) is an appropriate and needed approach at all European borders to improve the functioning of secondary capacity markets. | EnBW, Gas Natural, EURELECTRIC, Nordenergi, NWEPP, EFET |
| The design of long- and short-term capacity allocation rules should ideally also include a flexible and efficient secondary market of capacity rights. | EEX/Powernext |
| It does not make sense to have this discussion in all regions separately: a conclusion and decision on the product features is necessary, and fast regional implementation is now urgent. | EURELECTRIC |
| Stress the good experience with existing platforms such as “E-trace”, DAMAS platform, operated by CEPS in CEE. | EURELECTRIC, EFET |
| Call for a unique interface for nominations. | EURELECTRIC, EFET |
| Any auction platform developed in one region should, in principle, be designed in such a way that it can be easily extended or incorporated into others regions. | EnBW, VERBUND APG |
| We have some concerns about the coherence and convergence of the ongoing processes and question that the rules will really be coherent and consistent once these auction offices are all in place. | EURELECTRIC, EFET |
| Special attention must be paid to the problem that the rules within each region are open to amendment, so that harmonisation between different regions is still possible. This is especially important for countries that are part of more than one region. | IFIEC |
| South-West region: implementation of long-term explicit auctions on the Portuguese-Spanish border is needed/good opportunity to establish a single auction office. | EFET Iberian TF, UNESA, Gas Natural, ETSO, Centrica |
| FUI region: the arrangement on the Moyle interconnector should be given the same attention as given to the IFA. | SSE |
| Central-South region: Additional obstacles are governance issues and potential conflicts of interest of TSOs taking part in more than one ERI. | ETSO |
| Too premature to compensate traders in case of curtailments with the market spread between two countries, as we do not yet have a fully functioning congestion management system. | VERBUND APG |

4.4 Day-ahead allocation

| Issue | Who |
|---|---|
| Favour an implicit auction approach which integrates the purchase of capacity and energy and thus increases the efficiency of the system. | Almost all respondents |
| The achievement of CWE market coupling is crucial for the next steps of inter-regional integration in Europe. | EEX/Powernext, Nordenergi, NWEPP, EFET, |

| Issue | Who |
|---|---|
| | EURELECTRIC |
| Accept later introduction of implicit auctions in “less-developed” regions. Coordinated explicit auctions will be OK until appropriate wholesale markets with liquid PXs are developed. | EFET, EURELECTRIC, ETSO |
| As the regions are progressing at different speeds, it could be helpful to enhance cooperation between the ERIs in order to avoid duplication of work and double financing, especially for TSOs being part of different regions. | VERBUND APG |
| Cooperation between PXs is crucial. Increasing integration means increasing number of PXs (and TSOs) involved – therefore, one joint institution might be necessary. | EEX/Powernext |
| The example of Market Coupling between Germany and the Northern Region has shown that slight differences in the allocation algorithms can lead to serious problems on the market. | VERBUND APG, IFIEC, EnBW, EURELECTRIC, Nordenergi, NWEMPP, EFET |
| There is an urgent need for coordination and harmonisation of the procedures and algorithms used at the platforms (auction offices and/or PXs) in order to avoid distortions of the market. | VERBUND APG, EEX/Powernext |
| Regulators are responsible for analysing the global situation, the costs/benefits for each border and for determining a concrete cross-regional plan. | Gas Natural |
| Before implementing FBMC, significant market improvement (and gain in social welfare) can already be achieved in the short- and medium-term through existing solutions, based on ATC market coupling (see TLC, MIBEL). The superiority of flow-based solutions should be tested in advance. | EURELECTRIC, ETSO, Nordenergi, NWEMPP, E.ON AG |
| At the moment we see two ways forward: horizontal expansion (gradual coupling) or coupling between regions (dome coupling). | EURELECTRIC, EEX/Powernext |
| The concept of a dome coupler is a pragmatic approach to couple the regions / to address many of the perceived inter-regional convergence questions. | EnBW, E.ON, EURELECTRIC |
| With the introduction of flow-based approach, the distribution of revenues needs to be changed. | VERBUND APG |
| Central-West region: The arising financial risk for some participants because of unclear cost recovery constitutes an obstacle. | ETSO |
| South-West region: market coupling should be a priority for both market operators and system operators. | EFET Iberian TF, UNESA |

4.5 Intraday allocation

| Issue | Who |
|--|---|
| Support the implementation of an implicit continuous cross-border intraday platform, on a first come first served basis with obligatory use. | RWE, EnBW, Gas Natural, EURELECTRIC, Nordenergi, NWEMPP, EFET |
| Intraday capacity should be given free of charge, as it is related to “non- | Nordenergi, |

| Issue | Who |
|--|--|
| congested” cross-border capacity in the day-ahead allocation. | NWEMPP, EURELECTRIC, EFET |
| Intraday should be implemented independently of the implementation of day-ahead market coupling. | Nordenergi, NWEMPP |
| OTC trading is needed to enhance the flexibility of the market and is also of particular relevance for traders’ self-balancing. | EnBW, Gas Natural, EURELECTRIC, Nordenergi, NWEMPP, EFET |
| Market parties have expressed clearly that the continuous trading model is the preferred one to meet market needs. Implicit or explicit auctions are simply not suited. Buyers and sellers should be able to cross several borders with “one mouse click” and straight through processing. | EURELECTRIC, EFET |
| Integrate intraday market procedures into the coordinated flow-based allocation systems. | VERBUND APG |
| It would be useful to have one open regional trading platform to ensure maximum possible liquidity. | EnBW, EURELECTRIC, Nordenergi, NWEMPP |
| Prefer to introduce more intraday auctions gradually in SW region, observing impact on liquidity, and combining it with continuous trading. | Gas Natural |
| Since capacity calculation for an intraday model is strongly depending on the calculation principles for day-ahead capacity, the introduction of fully harmonised intraday allocation schemes depends on the introduction of harmonised day-ahead allocation schemes. | ETSO |
| Stress again that intraday should already be in place on all borders: now urgent actions are needed regardless of any anticipated flow-based implementation. | EURELECTRIC, E.ON |

4.6 Balancing

| Issue | Who |
|---|-------------------------------|
| Support further integration of balancing markets. | RWE, GEODE, EFET, EURELECTRIC |
| In the process of integrating the national or regional markets, the integration of balancing markets is a worthwhile aim. But it should be given a lower priority than the aims of grid investment and maximising cross-border capacity or day-ahead and intraday developments. | IFIEC, Gas Natural |
| Specific capacity reservations for balancing energy would be detrimental, since this would unnecessarily reduce capacity available to market participants. | IFIEC, EnBW, E.ON, EFET |
| It is important to harmonise the market design of balancing markets within the regions. | EnBW, IFIEC, ETSO |
| As a first step, a TSO-TSO model should be implemented for cross-border balancing integration. | IFIEC, EURELECTRIC |
| The implementation of cross-border balancing markets needs to take | VERBUND APG |

| Issue | Who |
|--|-------------|
| into account the potentially congested borders: should TSOs reserve some capacity for cross-border balancing on congested borders which are not offered to the market (e.g. by increasing the TRM) or should market players offering balancing power also be obliged to acquire capacity on congested borders? | |
| Investigate efficiency problem when transporting balancing power over long distances or changing location of production of balancing power within larger control zones. | VERBUND APG |

4.7 Transparency

| Issue | Who |
|--|---|
| Transparency issues are a crucial point. A common understanding of transparency in the EU is essential. | Almost all respondents |
| Support clear and harmonised rules in the different ERIs: data should be disclosed in an equal and timely manner and on a standardised basis. This information could be published on a single information platform. | RWE, GEODE, IFIEC, EnBW, E.ON, EURELECTRIC, EFET |
| With regard to transparency, great improvements have been made by the various transparency reports within the Nordic, CWE and CEE regions which are harmonised to a high degree. Now it is important that these requirements and an adequate monitoring are implemented by the national regulators. | IFIEC, EURELECTRIC, Centrica, EEX/Powernext, Nordenergi, NWEMPP |
| It is important that transparency requirements are well-balanced: neither should some important data be left out, nor should the definition of the data to be published be too far-reaching. E.g. consumption data of large industrial users must be treated carefully, since the market power issue (which is the ultimate reason for transparency) is located purely on the supply side. | IFIEC |
| The preparation of exact definitions which are necessary for harmonised data-delivery and publication (e.g. for “outage”) takes much time and needs approval of national regulators and ERGEG. | ETSO |

4.8 Other issues

| Issue | Who |
|---|------------------------|
| Discriminatory barrier/significant distortion to competition: the prohibition of Spanish Market Agents importing electricity from France when their domestic market shares exceed 10%. | UNESA, EFET Iberian TF |
| Support the ease of access of foreign players to other markets, removing all possible barriers (language, legal and compliance process, ...). | Gas Natural |
| The competences of regulators greatly differ in the various countries, which is the reason for some difficulties in the decision-making process, caused by lack of decision-making power or contradictory requests of | VERBUND APG |

| Issue | Who |
|---|------|
| regulators. We welcome the proposals made in the current drafts for the Third EU Energy Package to tackle this issue on a European level. | |
| A missing central single entity constitutes another obstacle, as the coordination between national Regulators with partly different country-specific national legislation is very time-consuming. | ETSO |
| Regulated retail tariffs are a major barrier to develop cross-border trade and should be considered alongside wholesale market convergence activities. | E.ON |