COMMISSION
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Summary of the public consultation on the 2nd CRE report concerning the management and use of electricity interconnections

Background

On 18 June 2008, CRE published its second report on the management and use of electricity interconnections. The report describes the current situation with regard to the mechanisms of interconnection management, for each timeframe in which capacities are allocated.

One of the report's objectives was to take stock of the target mechanisms, on which a consensus now exists in Europe, and to draw up a list of the important questions still to be resolved to achieve these targets.

The list of questions, organised by timeframe (long-term, daily, intra-day, balancing) was directly submitted to the market players:

- A public consultation was initiated on 23 June and lasted three weeks;
- A workshop was organised on 30 June at CRE's offices and resulted in a productive dialogue between CRE's departments and the technical experts of interconnection players.

Participants in the 30 June workshop

36 outside participants, representing:

- 26 market players:
  - International players, already present on the interconnections in France and elsewhere: ATEL, CNR, Constellation, Danske Commodities, EDF, EDF Trading, Edison, EDP, EGL, Electrabel, EnBW Trading, Endesa, Enel Trade, EON Trading, EOS, Gas Natural, Gaselys, Gaz de France, Goldman Sachs, Iberdrola, RWE Supply and Trading, Total, Vattenfall, Verbund;
  - French alternative suppliers: Direct Energie, Free Energie;
- RTE;
- Powernext.

Participants in the public consultation

15 responses were received:

- 3 associations: BDEW (German energy industries), EFET (European Federation of Energy Traders), Uniden (French energy-using industries);
- 9 market players that use interconnections: ATEL, Centrica, CNR, EDF, Electrabel, EnBW Trading, Iberdrola, RWE Supply and Trading, Vattenfall;
- 1 power exchange: Belpex (Belgium);
- 1 private individual wishing to see the emergence of a "single European grid".
- 1 anonymous actor

General comments on the report

The players began by commending CRE for the work done in the report. They emphasised the excellent quality of both the report and the conference organised on 30 June.

EFET stated that the document was very valuable for the market's development and the participating agents, and that it would be a good idea to publish such a document on a regular basis as a cooperative effort between the regulators of regional initiatives, to enable real monitoring of the market's operation and of interconnections in the respective regions.

Electrabel stated that CRE is asking the right questions and tackling difficult topics, such as firmness of capacity.

Summary of responses to the "Allocation of long-term capacities" section

- **Firmness of capacity**

  - **How is the financial risk associated with socialising the cost of capacity firmness evaluated?**

The players note that congestion revenues have historically exceeded the costs of ensuring the long-term firmness of the products, which means that the TSOs have income for initiatives to cover this financial risk (Centrica, EDF, EFET, Electrabel, EnBW, Iberdrola, Vattenfall, an actor).

Furthermore, TSOs have tools to cover the risk associated with firmness of capacity (buying capacity on the secondary market prior to D-1, buying back capacity during the daily auction, balancing offers available locally or from neighbouring TSOs) as well as better information (price level, physical flows, consumption and generation data, etc.).

Finally, the players call for compensation based on price differentials in the event of curtailments, with no cap. Only Uniden opposes the principle of indemnities based on price differentials, which amounts to transferring the market risk from the player to the TSO and therefore to final consumers.

  - **How can TSOs be incentivised to trade off fairly between the capacity level and the cost of firmness?**

First of all, the players note that in order to make the most effective decisions, TSOs must consider real price signals when they set capacity curtailments, which is why they are asking for compensation based on price differentials. According to an actor, a better product will also be better valuated by the players.

According to EFET, Electrabel, EnBW and Iberdrola, a mechanism must be introduced that gives TSOs financial incentive to maximise the capacity sold at annual (and monthly) auctions and that penalises poor management of interconnections. If the financial risk for TSOs to ensure firmness of capacities is totally covered, they will be incentivised to increase their profits by optimising interconnection management using the tools described in the report. The incentive scheme could be based on net revenues from the annual and multi-annual auctions of long-term capacities: TSOs would thus have incentive to keep their costs as low as possible by making congestion management more efficient, while at the same time guaranteeing the firmness of the products.

For EDF, the capacity level can be increased and uncertainty for TSOs reduced by greater coordination between TSOs (e.g. expanding the mission of CASC[1]).

For Uniden, TSOs could have objectives in terms of the rates and firmness of the capacities made available to the market, based on the model used by CRE for quality of supply. The players would only be compensated if the TSO exceeded its quality commitments.

[1]Platform shared by the seven TSOs of the Central-West region, to be launched at the end of 2008.

Finally, EDF added that the goal of using incentives must be considered in the context of regional integration and that its success requires support from all the national regulators.

- **How can confidence in price references from the organised markets, on which price differential compensation would be based, be improved for all stakeholders?**

All the players believe that confidence in price references can be increased by improving transparency (e.g. by applying ERI transparency reports) and by improving market liquidity.

The players also highlight the importance of harmonising the rules and setting up consistent regulations for all markets. There is a consensus among the wholesale market players on using power exchange prices as independent price references. However, such price references must exist on both sides of the border in order to use compensation based on price differentials (EFET, Iberdrola).

- **Could the implementation of caps to limit the cost of compensation (cap on the price differential level and/or on the compensation period and/or on the total amount of the compensation) be an acceptable transitional step for the market operators and TSOs? If so, at what level should these caps be fixed?**

Nearly all the players applaud the introduction of compensation based on price differentials, but believe that introducing any upper limit on the indemnities would subject the players to a portion of the risk linked to the lack of firmness, and that this could lead to market inefficiencies (EFET).

Caps would only be accepted for a transitional period, with a broad consultation of the players before the amount is fixed.

The players (EFET, EDF, Iberdrola, EnBW, Electrabel) would generally support an upper limit on a total compensation amount per month, for example. The limit could be based on monthly revenues plus 1/12th of the revenues from annual auctions, and also on unused revenues from the previous months (i.e. income from m-3 to the current month). Revenues from daily and intra-day auctions should also be taken into account. EFET and Iberdrola propose dividing the monthly cap between all the hours during which capacity was reduced.

On the contrary, the players are against a cap on the hourly price differential.

For Electrabel, if such a price cap were fixed, it would have to be asymmetrical, set for each interconnection direction. Also, a cap on price differentials requires harmonising the different limit prices from one exchange to another (EDF).

For Vattenfall, there should not be any curtailments; capacities should be guaranteed by redispatching.

- **Physical and financial rights**

- **Would the extra cost to the market operators of converting long-term capacities into financial products (which would have to be done through the organised markets) not be largely compensated by the savings associated with the simplification of procedures for accessing the interconnections and the increase in liquidity of the organised markets?**

For most of the players, the switch to financial rights offers definite advantages. For example, financial rights achieve the following: they eliminate the arbitrary distribution of capacities between timeframes, reduce the volatility in day-ahead prices and thus lower prices for long-term rights, remove barriers to entry, reduce operational costs for TSOs and other players, and facilitate the secondary market. However, before implementing such a system, it must be determined whether finance or energy regulations will apply to financial rights, and also the commission amounts to be charged by the exchanges.

Some players are also asking for harmonisation between the different schemes that govern renewable energy sources; the need to track the origin and transit of energy (e.g. green certificates) could justify keeping part of the rights physical (Iberdrola, Electrabel, EDF, EFET and an actor).

For Uniden, switching to financial rights would be another step in the excessive financialisation of the electricity market and this is not at all desirable.

- **Would converting long-term capacities into financial products not be an effective way of increasing the liquidity of the organised markets, and consequently of improving confidence in the price references?**

According to certain players, such as EFET, Electrabel, Iberdrola, EnBW, Vattenfall and an actor, this conversion would increase liquidity, but much less so than guaranteeing firmness through indemnities based on the market price differential, regardless of whether the rights are financial or physical. In general, how efficient the financial rights are depends on how the conversion is carried out. These players want regulators to organise a public consultation on physical rights and financial rights that includes the exchanges and the TSOs.

For EDF, it is the increase in long-term capacities made available and the pluriannual transmission products introduced by TSOs that constitute an important vector for increasing liquidity.

An actor highly doubts that introducing financial rights increases liquidity. The combination of market coupling/financial rights would lead to a strong decrease in the volumes exchanged over the counter.

- **Secondary markets**

- **Leaving aside the buying back of capacities by the TSOs to avoid curtailments, would the added value offered by an anonymous secondary organised market be enough to make it a high priority?**

According to EFET, Iberdrola, EnBW and an actor, this type of project is important for improving liquidity in electricity markets and in capacity transmission rights markets, but it is not a priority so long as the primary capacity market is not fundamentally solid. The players assert that the first priority is guaranteeing the firmness of capacity transmission rights with compensation based on price differentials.

In addition, the option of an anonymous secondary organised market must be compared in terms of cost/benefit with the option of having one or several brokers, which also guarantees anonymous transactions (EDF).

- **What additional flexibility would the market operators like?**

Certain points would improve the efficiency of a secondary market:

  - implementing the UIOSI mechanism (Centrica, EnBW, Iberdrola, an actor);
  - publishing the names of capacity holders at the time of primary allocation, as is done on the France-Italy border (EDF);
  - a reliable, functional information system, e.g. Damas platform (EDF, Electrabel);
  - possibility to notify as close as possible to the gate closure and not at D-2 (EDF).

- **Why do some market operators not want the names of capacity holders on the French interconnections (excluding the France-Italy interconnection) to be published?**

Centrica, EDF, Electrabel, Iberdrola, Vattenfall, two actors and most members of EFET are in favour of TSOs publishing the list of capacity holders.

According to EnBW, the information is commercially sensitive, and the list of capacity holders is not necessary for an exchange.

- **Scope of the auction platforms**

- **Should separate projects be rolled out in all regions, or should the progress made with one be used to save resources in the others?**

The players are in agreement that the ideal situation would be a single platform. However, developing one platform per region with a high degree of harmonisation would be an essential step in the short term, with the merging of the different regional platforms in the long term.

Ideally, an auction platform developed in a given region must be able to incorporate the other regions easily. For Electrabel, the CASC platform developed in the Central-West region could be extended to the other regions.

However, priority must not be given to any particular project; the advantages of the different approaches must be used in order to leverage good practices.

Summary of responses to the "Allocation of daily capacities" section

In general, CNR has reservations about market coupling. It expressed doubts about the positive effect on transit capacity, and asserted that coupling may hurt liquidity in OTC markets. No other players expressed such reservations.

For Uniden, market opening is a failure given that electricity prices have tripled since 2003. It calls for an investigation into the electricity market's design prior to any coupling project. Furthermore, it calls into question the role of interconnections in the operation of a single market.

- **Compatibility and order of the coupling projects**

  - **How could the various coupling projects currently in progress be coordinated at interregional or European level? From an operational point of view, how can the interaction between the next two market couplings, such as the coupling of France and Benelux with Germany or of Germany with Denmark, be managed effectively?**

All the players highlight the importance of a Europe-wide road map for coordinating and prioritising the projects of the different regions. The road map should be the product of collaboration between national regulators and the European regulator (ACER), ERGEG or the European Commission. Several players believe that the delays in implementing current projects are partially due to the absence of a road map. Nonetheless, defining such a road map should not cause further delays. Some players (EFET, EnBW) note that additional delays could undermine the credibility of the projects, or even of the regional initiatives.

Moreover, most of the players expressed doubts regarding the real credibility and authority accorded to ACER, in case it lacks the support of national regulators. They emphasised the importance of having in-depth knowledge of all the regions and projects under each national regulator, to avoid inconsistencies.

Concerning the specific coupling projects in progress, the opinions are more divergent. Several players (EFET, Iberdrola, an actor) have doubts about the flow-based market coupling project in the Central-West region, worrying that the risk of locally sub-optimal flows might distort their understanding of the market. They would prefer an algorithm based on iterative bilateral couplings, giving priority to local optima rather than a global optimum. Electrabel says it supports the flow-based method, but considers it too ambitious for the moment, thus joining the other players who would like to see the introduction of flow-based market coupling postponed.

With regard to coupling techniques between the regions, several players (BDEW, Vattenfall) advanced "dome coupling"[2] as an acceptable solution.

  - **What priority can be given to the different coupling projects? On the basis of what criteria?**

[2]Solution proposed by ETSO and EuroPEX to coordinate various couplings.

Certain players note the importance of a Europe-wide road map in prioritising the various projects (cf. question above). The prioritising criteria mentioned are the estimated growth of social welfare, probability of success, compatibility with the other projects, speed of implementation and increased liquidity in the electricity markets.

Most of the players support giving priority to the Central-West coupling project. Following this project, the region would have to be coupled with NordPool (after a transitional period of explicit auctions on NordNed), before integration of the Iberian Peninsula and the France-UK-Ireland, Central-South and Eastern Europe regions. Only EnBW gives first priority to the coupling project between Germany and NordPool, arguing that this approach would offer a larger body of experience for the coupling of the two biggest areas (France-Benelux and Germany-NordPool). Several players emphasise the importance of harmonising the markets. EnBW cites "dome coupling" as an intermediary solution for integrating markets before harmonisation is complete.

Electrabel is disappointed by the lack of long-term products on NordNed, and emphasises, together with EDF, the importance of harmonising products in order that a financial cover product compatible with the Scandinavian and continental models can be created.

- **Status of power exchanges**

  - **How can the development of coupling projects, which naturally involves the exchanges, be reconciled with their current status?**

All the market players (except Centrica) draw attention to the monopoly position the power exchanges gain on day-ahead exchanges when markets are coupled. They propose regulating the power exchanges for this activity.

Electrabel emphasised that if markets are coupled, the exchanges become simple holders of order books, and proposed that responsibility for matching be transferred to TSOs or to platforms such as CASC. Electrabel is pleased to see Powernext and EEX merging, and views this as a means of facilitating market integration and possibly reducing transaction costs for companies trading power on both exchanges. Finally, Electrabel expressed frustration at the exclusion of producers from the shareholdership of the exchanges. This exclusion is set forth in the third legislative package.

  - **Would changes to the regulatory framework of the exchanges be desirable? If so, what changes?**

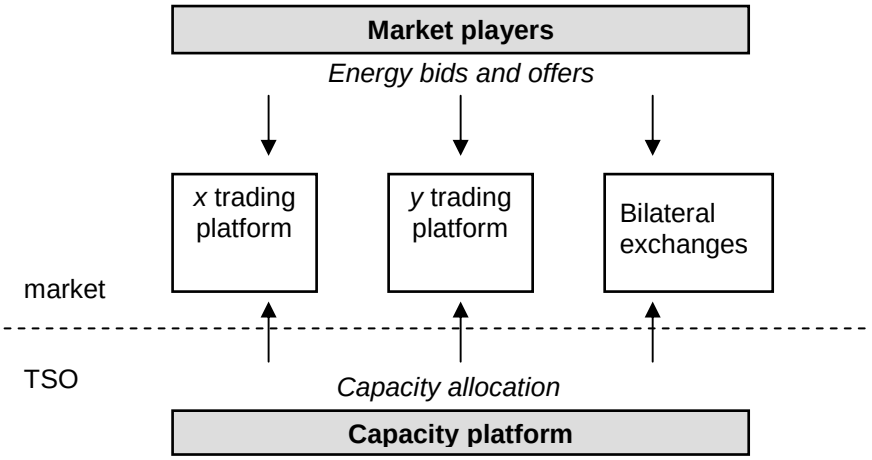
The players call for the intervention of national regulators or the European regulator from the moment the power exchanges acquire a monopoly (cf. previous question). Regulators must validate matching and allocation mechanisms ex-ante, track their application ex-post and monitor the exchanges' revenues.

EDF also emphasised that a financial bonus/malus beforehand.

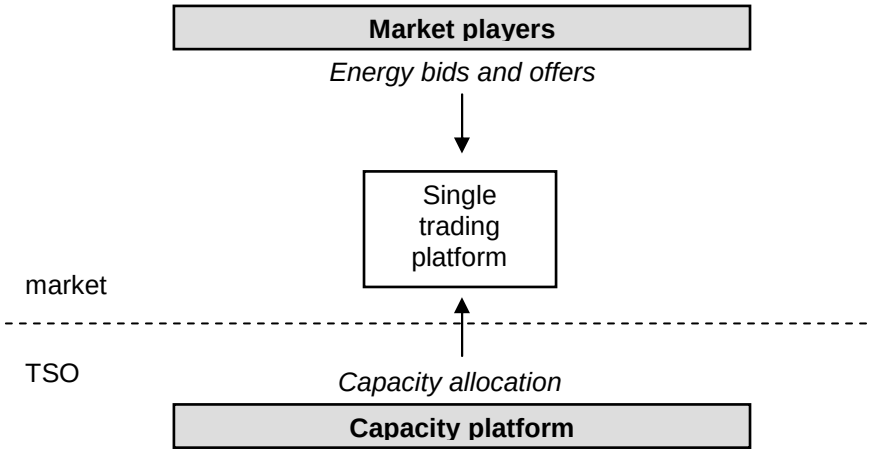
Summary of responses to the "Allocation of intra-day capacities" section

The report described three models for managing electricity exchanges.

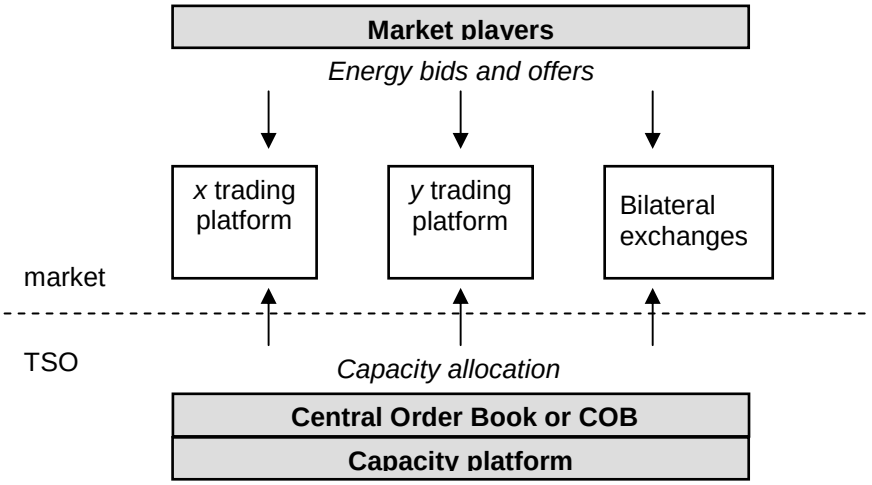
- Model 1: intra-day exchanges with several competing trading platforms



- Model 2: intra-day exchanges with a single trading platform



- Model 3: intra-day exchanges with a capacity platform centralising offers made on different trading platforms



CNR remains attached to the current model (explicit allocation) and opposes a mandatory organised market as it would be unsuitable for large volumes. A sharp rise in the number of orders[3] to meet high demand can increase prices; anonymity also heightens this risk given the possibility of speculation[4].

- **Management of electricity exchanges**

  - **How can sufficient liquidity for intra-day exchanges be guaranteed (model 2 or 3)?**

Most players said they were in favour of model 3 because it concentrates liquidity on a central order book shared between several markets and increases market depth while fostering competition between several platforms. A central order book and the implicit allocation of capacities, the latter making it possible to allocate capacity simultaneous to an electricity exchange, are perceived as the means to making optimal use of interconnection capacities. Furthermore, some of the players are asking for "take it and use it", i.e. mandatory use of the allocated capacity, with the same view to optimal capacity usage.

Model 3 is sometimes seen as an intermediary model on the way to a single platform (model 2).

However, an actor prefers model 1 for the competition it enables between platforms and the possibility to use OTC, i.e. the possibility for bilateral exchanges, without going through an organised market.

Most of the players reaffirmed their desire to preserve OTC. Electrabel also noted that conducting bilateral transactions on exchange platforms could hinder their smooth operation. In addition, OTC is a form of competition for the exchanges, and may encourage them to offer reasonable tariffs.

  - **Is competition between the intra-day trading platforms (model 1) viable in the long term, or will it lead to the emergence of a single platform?**

The players are in favour of competition between platforms, at least initially. Competition between platforms and with OTC should make it possible to guarantee satisfactory service at reasonable costs. TSOs keep possession of interconnection capacity, which they distribute to the exchanges and to OTC in a non-discriminatory way, using a "first come, first served" system.

Several players believe that the number of platforms will tend to decrease in the long term, or even that a single platform will control the entire zone in question (Electrabel, RWE S&T, an actor).

But the players reassert that model 1 will not allow optimal use of capacity (EFET, EnBW, Iberdrola)[5].

  - **If a monopoly were to develop, should it be regulated? If yes, how?**

Most of the players restated that every monopoly must be regulated. Centrica went so far as to note that the platforms should be regulated whether monopolies or not.

However, according to Electrabel, insofar as the exchange platform does not belong to one of the players, there is no real need to regulate it. In contrast, the capacity platform and the central order book must be regulated.

Finally, EnBW reasserted that an exchange platform, even one for electricity exchange, must be regulated by a financial regulation authority. It also noted that overly strict regulation can distort the structure of the markets.

- **Project added value**

[3]Comment: on Powernext in any case, a rapid increase in the number of orders does not seem necessary; it is possible to obtain a single order for a large volume and to "hide" part of it.

[4]Comment: in contrast to OTC where a gentleman's agreement can contain the prices.

[5]The players' remarks on competition between platforms are valid for models 1 and 3, and are not limited to model 1. The exclusive reference to model 1 undoubtedly surprised the players, which is why they reasserted their preference for model 3.

- **What intra-day mechanisms should the TSOs introduce in the short term? And in the medium term?**

EDF, EnBW, RWE S&T and Vattenfall believe that implicit capacity allocation and continuous trading (similar to the Elbas system) should be put in place. EDF notes that this is up to the TSOs and the regulators.

For EFET, the first priority is establishing greater transparency, guaranteeing non-discrimination and harmonising the rules of the national markets. Implementing a better intra-day system is secondary to implementing an efficient day-ahead system.

The existing model suits Electrabel, at least initially, provided that improvements are made at certain borders:

- at the French borders, the "pro rata" model needs improvement;
- the explicit auction system set up at the Spanish border is an improvement, but it remains a complex system and the fact that intra-day capacity is not free may hinder its optimal use;
- the mandatory use implemented at certain German borders offers less flexibility, and is more advantageous for producers than for traders;
- market splitting would be useless for the intra-day timeframe, even for a transitional period, because the volumes are too small.

In the medium term, Electrabel would like to see continuous trading with implicit capacity allocation, keeping open the possibility of bilateral exchanges. It does not want to combine auctions with continuous trading.

- **In the current context, where improvements are being made to the long-term auctions, day-ahead market coupling is being extended and balancing market integration is being envisaged, what priority should be given to setting up more sophisticated intra-day mechanisms?**

According to EDF, priority should be given to the intra-day timeframe. Intra-day mechanisms should at least be introduced on borders that lack them, such as the Dutch and Italian borders.

Electrabel thinks that day-ahead and intra-day projects can be conducted in parallel. For Electrabel, while flow-based market coupling for the day-ahead timeframe imposes a flow-based intra-day mechanism, there are no obstacles to implementing a better ATC-based intra-day mechanism in the mean time.

The priorities of the other players are:

1. long-term auctions and firmness of capacity;
2. day-ahead market coupling;
3. intra-day timeframe;
4. integrating the balancing mechanism.

Summary of responses to the "Balancing exchanges" section

- **Access to interconnection capacity: Should interconnection capacity be reserved, beyond the needs resulting from the pooling of primary reserves, to allow balancing exchanges?**

By a large majority, the players are against reserving interconnection capacity for balancing exchange needs. They highlight the importance of offering maximum capacity to the market and the goal of maximising the use of available capacity.

Electrabel believes that reserving interconnection capacity would affect the day-ahead market price and limit price convergence.

EFET, Iberdrola and an actor highlight the need for further consideration to determine what proportion of capacity, if any, should be reserved to maximise the social welfare. They encourage CRE to prepare a report on this subject. However, EFET and Iberdrola believe that, in principle, reserving capacity will not allow reaching the goal of maximised capacity usage. As for an actor, it does not oppose reserving a portion of capacity. Finally, EDF proposes using part of the transmission reliability margin on interconnection capacity for balancing exchanges, depending on the circumstances and subject to the TSO's evaluation.

- **Model for managing the balance between injections and withdrawals: Under what circumstances should the balance between injections and withdrawals be guaranteed almost exclusively by secondary reserves?**

Relying almost exclusively on secondary reserves to manage the balance between injections and withdrawals should only be done in emergency situations or for small isolated grids. EDF notes the economics inefficiency of doing so for the highly interlinked continental grid in Europe, due to the extra management costs and the decrease the incentives to be balanced for balancing responsible parties.

Electrabel argues in favour of defining contracts for reserves on a daily time step to facilitate cross border exchange of contracted reserves via seldom used interconnections (e.g. Italy-France direction).

An actor believes that TSOs are responsible for this question.

- **Desirable degree of harmonisation: What degree of harmonisation of the balancing mechanisms is desirable, particularly as regards:**
  - **the format of balancing offers,**
  - **the remuneration principle of balancing offers,**
  - **the calculation of imbalances and the settlement price of the imbalances?**

The players support a gradual harmonisation of balancing market designs. Centrica emphasised the need for regulators to draft guidelines (Guidelines of Good Practice for Electricity Balancing Market Integration, ERGEG ENM-4) with the aim of defining common principles for balancing management. According to an actor, the priority is to harmonise the imbalance settlement system (This actor supports France's adoption of the German model).

EnBW discussed the importance in the harmonisation process of maintaining strong incentives to invest in capacity reserves (by remunerating capacity), in order to mitigate future risks related to the European objectives on renewable energy production.

EDF and Electrabel support the TSO-TSO model, which requires little harmonisation. EDF supports the widespread deployment of the pragmatic initiative taken by the BALIT project (UK-France balancing exchange) along with the creation of a single European platform for balancing offers equipped, on the example of the intra-day platform, with an interface providing the available residual capacities for balancing.

Vattenfall proposes creating a common reserve product, based on the most flexible existing product, which would enable TSOs to pre-balance their system.