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# Consultation on the Framework Guidelines on Electricity Balancing

# EFET Response – June 25<sup>th</sup>, 2012

The European Federation of Energy Traders<sup>1</sup> (EFET) welcomes the opportunity to comment on the draft Framework Guidelines on Electricity Balancing published by ACER on April 24<sup>th</sup>, 2012.

EFET generally agrees with the broad thrust of the Initial Impact Assessment. In particular, a high degree of harmonisation is needed around the issue of balancing and imbalance in order for European markets to function effectively. Without this, market outcomes will be driven by differences in regulatory arrangements rather than by economic fundamentals. If anything, the Framework Guidelines do not go far enough in addressing the various inconsistencies that currently exist.

Meanwhile the draft Framework Guidelines themselves are a sound basis for the development of rules to pursue the objective of the single European electricity market. Efficient balancing arrangements are particularly important for the development of liquid wholesale markets, ensuring generation adequacy and supporting the EU targets for penetration of renewable generation. As renewable penetration grows, it is important that all market participants are given the maximum incentive and opportunity to balance their positions in day ahead and intraday markets.

In addition, a consistent set of rules for cross border balancing will also encourage optimal management and coordinated operation of the European electricity transmission network. This will bring considerable benefits to consumers by using generation assets in the most effective way. The draft Framework Guidelines generally reflect these objectives

In summary, EFET values the draft Framework Guidelines as a strong document aiming in the right direction to pursue the objectives of the EU internal electricity market.

However, EFET would like to comment on the specific questions in the consultation and draw the attention of ACER to a number of extra remarks relevant to the definitions, to underlying principles and to future operation of increasingly linked and harmonised zonal balancing markets:

<sup>&</sup>lt;sup>1</sup> The European Federation of Energy Traders (EFET) promotes and facilitates European energy trading in open, transparent and liquid wholesale markets, unhindered by national borders or other undue obstacles. EFET currently represents more than 100 energy trading companies, active in over 27 European countries. For more information: www.efet.org.



# 1 General provisions

#### 1.1 Scope

Regarding the coverage of the Framework Guidelines, the text mentions that "They cover the areas pursuant to Article 8 (6) (h) and (j) of the Electricity Regulation, i.e. the rules for trading related to technical and operational provision of system balancing and the balancing rules **including network-related power reserve rules** [...]". We would like to suggest a wording change from "network-related power reserve rules" to "system-related power reserve rules", as "network-related" wrongly suggests that reserves for transmission congestion management also fall under the scope of the Balancing Framework Guidelines.

# 1.2 Links and dependency

EFET would like to stress the importance of the coherence between the network codes developed by ENTSO-E. Although, as noted in the Framework Guidelines, some redundancy between the network codes is inevitable, ACER should remain vigilant that redundancy occurrences in ENTSO-E network codes are kept to the minimum, and that absolute coherence between the various network codes is ensured in those rare cases. Evidence of inconsistency has already been observed in draft ENTSO-E network codes, in the definition of some key concepts (e.g. the definition of an emergency situation, which differs in the Capacity Allocation and Congestion Management (CACM) network code and the System Operation network code).

# 1.3 Definitions

EFET suggest adding to the definition of "Bidding zones" the following clarification:

"**Bidding Zone** - A bidding zone may consist of one or more control areas, but may also extend across the control areas managed by two or more TSOs."

To cover the latter case, the Framework Guidelines should include a comprehensive provision requiring affected TSOs to cooperate in unifying balancing arrangements within that bidding zone.

The Framework Guidelines introduce the term "*Cross-border (Transmission) Capacity*" whereas the NC CACM speaks of "*Cross Zonal Capacity*". For consistency reasons EFET suggests using the latter term in the Framework Guidelines on Electricity Balancing as well. During the consultation of the NC CACM EFET suggested the following definition:

"Cross Zonal Capacity - The capability of the network to accommodate commercially nominated flows between bidding zones without breaching operational security standards."

In any case, the sentence "Reservation of cross-border transmission capacity indicates (a portion of) available cross-border capacity, which is reserved for cross-border exchange of balancing reserves and thus is not accessible to market participants for cross-border energy trade." should be deleted as the substantive terms upon which transmission capacity is deemed to be capable of reservation or not should not be dealt with in the definitions.

Replacement Reserves are currently defined as "operating reserves used to restore the required level of operating reserve to be prepared for a further system imbalance. This category includes operating reserves with activation time from 15 minutes up to hours". EFET questions the need for this type of reserves to fall under the responsibility of the TSOs. This contradicts with the



aim that "*BRPs shall have the right incentives to manage their own balance close to real time.*" described under 5.3. If TSOs have restored the balance after an outage, market parties will continue to have imbalances and are responsible to balance these open positions. The market will be able to find the most efficient solutions to do so and while doing so, will automatically free up the operating reserves that were dispatched by the TSO. Therefore EFET suggest to either delete the notion of Replacement Reserves under the responsibility of TSOs completely, or to change the definition of Replacement Reserve so that there can be no overlap between TSO activities and the market domain. In any case the activation time should be limited from 15 minutes up to one or two hours.

# 1.4 Application

The aim of the Framework Guidelines being the "integration, coordination and harmonisation of the balancing regimes in order to facilitate electricity trade", ACER and NRAs should ensure that network codes stick to the principles and objectives established in the Framework Guidelines, regardless of whether or not deviations from the Framework Guidelines are considered to "go beyond" these principles and objectives. At any rate, NRAs should be entitled to not only review and reject or adopt, but also amend TSO proposals, in order to provide appropriate checks and balances.

The Framework Guideline should specify that NRAs may not only "*fix or approve* [...] the methodologies used to calculate or establish the terms and conditions for the provision of balancing services [...]" as mentioned in the fifth paragraph, but should be allowed to **change and adopt** the methodologies proposed by TSOs. As mentioned later in the same paragraph, market participants have to be informed and involved in the new proposals. This process should apply anytime NRAs decide to modify rules proposed by TSOs on which stakeholders have been consulted previously.

# 1.5 Derogations

The derogation possibility, when combined with the transition phase, opens the possibility that the network code might not be implemented until 2022 in some Member States. This seems unjustified given the need for an EU wide coherent approach.

The possible reasons set out in (a) and (b) of the draft Framework Guidelines are also rather implausible. It is not obvious why changes to balancing arrangements would lead to particular difficulties for TSOs in balancing their control areas, since the physical situation on the network (in terms of available resources and demand) will be the same. Likewise, other than for non-connected islands, the TSOs have the same situation. The current draft of (a) implies TSOs are entitled to a derogation if their national rules are different, which is rather circular.

# **1.6 ACER involvement**

No comment



# 2 General principles

# 2.1 General principles pursued in the Electricity Balancing Network Code(s)

The objectives laid out on page 11 should be better aligned with the overall objectives of the Framework Guidelines laid out on page 5 and the overall objectives of the Regulation 714/2009. If not, there will potentially be three layers of "objectives" and "general principles" which may be internally inconsistent and clash with other Framework Guidelines and Network Codes:

- "efficient functioning of the market" should be added to the objectives
- Add "in a non-discriminatory manner" after "fostering competition in balancing markets"

# 2.2 Role of TSOs in balancing

Balancing arrangements should encourage liquid wholesale markets in general as well as in the balancing phase. Hence, in a slightly firmer approach than the one taken by the Framework Guidelines, we believe that the integration of balancing markets is a **prerequisite** to properly functioning and efficient balancing markets, and not only an objective that TSO shall "**strive**" to achieve. We concur with the Framework Guidelines that TSO cooperation is an essential element of the integration of balancing markets.

In the third bullet point of the third paragraph, the Framework Guideline should be stronger with respect to harmonisation and not only refer to "adjacent markets". The concept of "adjacent" is not really applicable when talking about synchronously connected systems. This bullet should be changed as follows: "distortions that arise from different procurement mechanisms are progressively removed."

# 2.3 Terms and conditions related to balancing

EFET strongly supports the view of ACER that load entities (either as individual customers or through their retail suppliers), and renewable producers, must become BRPs and should have the possibility to be BSPs.

With respect to stakeholder involvement there should be scope for some form of Market Panel as EFET has proposed for elements of the CACM Network Code.

# 2.4 Transparency

In tackling transparency requirements, Network codes should ensure transparency:

- Of the quantification, and its justification, of required reserve generation capacity (MW) and timing of procurement of reserve capacity,
- Of steps during and after the procurement process (for example through publication of the procedure, of the contractual framework, of received and accepted bids and offers)
- In real time operation when TSOs are calling off balancing energy
- *Ex-post, concerning price outcomes and volumes transacted.*

Particularly any deviation from the merit order or activation of bids due to transmission service needs must be made transparent *ex post*.



EFET very much welcomes the requirement that settlement outcomes shall be published no later than one hour after the period in question. This is a major shortcoming in many Member States at present.

It should be clarified in the last bullet point in chapter 2.4 that the "volumes and prices of all balancing energy bids – possibly in an aggregated format – as well as volumes and prices of activated balancing energy bids of the previous imbalance settlement period" are published anonymously.

#### 2.5 Reporting

No comment.

# 3 Procurement of balancing services 3.1 Role of BSPs in balancing

In the first sentence it should be added that "the BSPs shall meet the <u>reasonable and justified</u> requirements (...) adopted by the TSO."

Further, it must be clarified that the BSP shall provide only information to a respective Distribution System Operator if his unit is connected to the grid of this Distribution System Operator.

# 3.2 Activation and cross-border exchange of balancing energy

3.2.1 Activation of balancing energy

Q1: Do you consider that harmonisation of the pricing method is a prerequisite to establish a *TSO-TSO* model with common *merit order list* for *balancing energy*? Do you support the use of the pay-as-cleared principle?

Harmonisation of the pricing method is indeed a prerequisite to establish a common merit order model for balancing energy.

**EFET supports uniform/marginal pricing above pay as bid**. The academic literature is ambiguous and there is support for both methods from several well-known researchers. However, when looking at balancing markets which are sub-hourly, real-time energy markets providing centralized, region-wide generation dispatch the literature is more in favour of marginal pricing (i.e. a single price based on the highest accepted bid during a given settlement period). In comparison to pay as bid, a system with marginal pricing provides for more efficient dispatch, it is easier to prepare bids and therefore better for smaller providers and provides accurate price signals to balance responsible parties (BRP).

Regarding gate closure time, EFET strongly supports the view of the Framework Guidelines that TSOs should **harmonise gate closure times** and set it as close to real time as possible. EFET recommends that **gate closure times should be set one hour before real time at the earliest**. (This of course requires that appropriate arrangements will have been put in place in all zones to allow continuous trading in the intra-day timeframe up to one hour before real time, including across borders between zones).



EFET also very much agrees that TSOs should allow the participation of non pre-contracted reserves in the provision of balancing energy. The Framework Guidelines should clarify that TSOs should optimise all balancing energy resources, including those from non pre-contracted resources.

#### 3.2.2 Cross-border exchanges of balancing energy

In the second paragraph, the Framework Guidelines introduce the concept of netting imbalances, understood as "TSO [coordination] in order to minimise, when economically efficient, counteracting activation of balancing energy between adjacent control areas, taking into account cross-border capacities". The Framework Guidelines should be more specific regarding their understanding of how cross-border capacities are to be calculated. In that perspective, we suggest to change the wording to "taking into account the unused and available cross-border capacities after the closure of intraday market".

EFET supports the idea to allow TSOs, as a first step, to net system imbalances (or Area Control Errors) between different control areas. However, this should not lead to improper or adverse incentives on market participants to balance their own individual positions before gate closure. Some clarity is therefore needed in the network code on the calculation of imbalance prices for settlement of individual imbalances if netting is performed.

Q2: Do you think the *"margins"* should not exceed the reserve requirements needed to meet the security criteria which will be defined in network code(s) on System Operation?

EFET agrees that the margins should not exceed the reserve requirements. When setting the amount of unshared bids (i.e. margins) it must be guaranteed that a significant quantity of bids is made available for sharing among TSOs. The process of setting margins is an acceptable transition to the final target model but margins, if specified by TSOs, should be reduced over time.

Q3: Do you support to aim at similar target models for *frequency restoration reserves* and for *replacement reserves*? Do you think a distinction should be made between manually-activated and automatically-activated *frequency restoration reserves* in terms of models of exchanges and/or timeframes for implementation?

Yes, EFET supports a similar target model for *frequency restoration reserves* and for *replacement reserves*.

The distinction should indeed be made between manually-activated and automaticallyactivated *frequency restoration reserves* in terms of models of exchanges and/or timeframes for implementation.

Before integrating the various aspects of balancing and reserve markets, there is a need to clarify what is meant in the definitions of these different products. This is currently covered in the draft network code for operational security. Generally speaking, EFET preference is that the priority should be the alignment and integration of the procurement and use of replacement reserves, as well as of the relevant pricing both applied to BSPs and charged for imbalances of BRPs. This should be achieved within the three year deadline and margins progressively



reduced after that. There is an urgent need to develop continuously traded intraday markets, including across zonal boundaries, concurrently with this timetable.

#### Q4: Do you support the timeframes for implementation?

While EFET supports the timeframes for implementation proposed in the Framework Guidelines, given the complexity of the matters to harmonise, we request that the Network Codes foresee more detailed implementation plans, with regular reporting by TSOs on the progress and remaining steps to be taken to reach full implementation of the target model.

In this respect EFET supports the development of a pilot implementation project for the TSO-TSO model with common merit order between two control blocks – as requested by ACER and to be followed up under the AESAG framework.

Generally speaking we expect frequency restoration reserve (in future) to be used within settlement periods (i.e. 15 minutes and less before real time). Although there are benefits in cross border exchange in this portion of the market, there should be less impact on the traded market itself from this aspect of TSO operation and it should thus constitute a lower priority under the Guidelines. A longer deadline is appropriate here. However, because of the long implementation lead times, in parallel we also see the need for development of regional pilot projects, especially for the exchanges of frequency restoration reserves, as we explain under Q5 below.

Q5: Do you consider regional implementation objectives as relevant milestones which should be aimed at in these framework guidelines on electricity balancing and the Electricity Balancing Network Code(s)?

Acknowledging the considerable amount of time needed to reach the final target model, the guideline should define possible interim target models. A prerequisite for any interim model is that the guideline must forbid any mandatory offering to the local TSO. The guideline could oblige ENTSO-E to specify in its network code pilot projects the facilitation of bilateral (or even multilateral) TSO to TSO models with common merit order. Harmonising current balancing market design will be significantly easier on a bilateral or trilateral basis. It is important that such projects are extendable and facilitate the inclusion of new control areas. Successful pilot projects will receive requests to join from neighbouring TSOs and integration on a bigger regional scale will take place gradually.

Implementation work on these pilots can be done in parallel to the implementation of the final intraday target model.



# **3.3 Procurement and exchanges of contracted reserves 3.3.1 Procurement of contracted reserves**

The FG should explicitly forbid the application of rules that oblige market parties/generators to offer a certain amount of reserves or to keep a certain amount of reserves available.

The FG should explicitly forbid that TSOs impose unnecessary restrictive conditions on reserve products (such as a minimum size of more than 1 MW or restrictions on pooling of reserves).

# **3.3.2** Cross-border exchanges of contracted reserves

No comment.

# 4 Reservation and use of cross-border capacity for balancing 4.1 Underlying grid model and cross-border capacity calculation for balancing

The reference in the second paragraph to the possibility for balancing network codes to *"allow locational information of balancing resources to be used to further optimise the balancing of the system and avoid congestions"* should be handled with care. This reference to congestion may lead to interferences and overlap with the CACM network code. ACER should ideally precise the boundaries of this statement in the Framework Guidelines, and in any case strictly monitor its implementation by TSOs in the network codes.

# 4.2 Use of cross-border capacity for balancing

No comment.

# 4.3 Reservation of cross-border capacity for balancing

**EFET** opposes any ex-ante reservation of cross-border transmission capacity by TSOs for reserve capacity products and balancing purposes for the target model, even during interim periods. The main argument offered in favour of any such reservation is apparently the suggested criterion of social welfare maximisation. However there are many ways to calculate social welfare and there are considerable challenges to model such a calculation, especially with regard to what assumptions, data and prices should be taken into account. (For example, an optional reservation by TSOs would interfere with normal capacity allocation mechanisms in forward, day-ahead, and intraday market timeframes, and hence impact the market social welfare). On top of that, the question needs to be answered, who shall commission such a social welfare calculation, given the strong likelihood that such studies will reflect in their final outcome the initial intention of the contracting body.

Therefore, all available transmission capacity should be offered to the market for forward, daily and intraday trading. After intraday gate closure, TSOs can make use of any unused transmission capacity for accessing balancing energy and potential reserve capacity.



On top of that TSOs may make use of the probabilistic approach: "Within shorter time horizons (e.g. a week up to one month) it may sometimes be possible to reasonably predict the flows between two countries. In such cases a neighbouring TSO could pay for reserve capacity in the other country, without reserving transmission capacity. If the cost of reserve in the other country is significantly lower and the probability of the inter-connection capacity being available high, the TSO might find the deal worthwhile. The approach does not interfere with other markets, and it should be up to the discretion of the TSO to decide on the use of this option."

If cross border reservation is ever to be permitted, it should be based on TSOs buying back capacity from the amounts allocated to market participants. Approval from all national regulators affected must be obligatory and market participants must be consulted. It should not be allowed for any period longer than one year and decided on a case by case basis.

# 5 Balance responsibility and imbalance settlement

# 5.1 General principles

No comment.

# 5.2 Role of BRPs

This section of the Framework Guidelines leaves too much room for TSOs to introduce excessively high incentives (or penalties) on BRPs to be fully balanced in real time. Instead of obliging BRPs "to provide a balanced program in the day-ahead time frame" the Framework Guidelines should state that "BRPs provide the TSO with a reasonable forecast for the day-ahead position." Requesting a fully balanced position at day-ahead stage is detrimental to the development of liquid intraday markets. Real time balancing must be done at a system level by TSOs, through a market-based pricing of imbalances which will set the correct incentives. This will avoid on the one hand that BRPs will neglect their responsibility which could endanger system security, and on the other hand that BRPs are over-incentivised (e.g. through penalties), which could lead to unnecessary withholding of reserve capacity (which would cause a welfare loss).

# 5.3 Imbalance settlement

Q6: Do you consider important to harmonise *imbalance settlement*? Do you think these Framework Guidelines on Electricity Balancing should be more specific on how to do it?

EFET considers that imbalance settlement should be harmonised at European level. At the latest, the network codes should define the principles for imbalance settlement, including:

- TSOs may use the same procured products either to balance the system (ensure that generation equals consumption minus grid losses and imports-exports) or to solve internal grid congestions (local grid constraints). However, when it comes to cost recovery a distinction must be made between the system operations service (imbalance/cash out prices), targeted on individual users, and the *transmission service* (solving grid constraints) which should be financed by grid tariffs.

- EFET advocates an imbalance settlement charge, based on the marginal – i.e. highest (for upward regulation) or lowest (for downward regulation) accepted – commercial prices offered



by suppliers during a given settlement period, that creates incentives for the BRP to be balanced and to avoid market participants unduly relying on the balancing mechanism. The bidding zones for balancing should be the same as those used for market coupling, and all market participants in a bidding zone should face the same imbalance price.

However there should not be asymmetric pricing of imbalances (e.g. different prices paid for being long or short within a given settlement period). Following delivery, any participants' imbalance should be settled at cash out prices, which reflect the marginal cost of the actions taken by the system operator to balance supply and demand in operational timescales. The guidelines should therefore define single price<sup>2</sup> imbalance settlement/cash out as the only imbalance settlement method.

- EFET agrees that the imbalance settlement period shall not exceed 30 minutes. We would go even beyond this and request that it should not exceed 15 minutes if a cost-benefit analysis proves this is feasible.

- The same principle of imbalance settlement (i.e. uniform settlement prices) must be applied to load and generation, for example through a unique common balancing group. Imbalance prices based on free price formation will reflect scarcity on the system (higher energy prices) and suppliers' opportunity costs (for example when allowing energy prices to be adjusted within day to reflect intraday market prices). They will thereby naturally give the needed price signals to incentivise BRP to stay in balance and at the same time avoid over-incentives that could lead to unnecessary withholding of reserve capacity. If designed properly, this will deliver security of supply at lowest cost.

EFET strongly supports the requirement for all generators – including intermittent and renewable generation - to be subject to the same requirements and to appoint a BRP which is responsible for imbalances. This should not be the TSO either!

- Initial settlement information (initial imbalance prices) should be **published immediately** after the trading period, whereas second and confirmatory settlement details should be published about three<sup>3</sup> days later.

- The Framework guidelines should take into account that in several Member States an Independent market operator or Power exchange are enabled to ensure imbalance settlement (not TSO).

 <sup>&</sup>lt;sup>2</sup> For example if the cash out price is 80 €/MWh those BRP who are short (i.e. showing a deficit in their balance group) will have to pay 80 €/MWh; those who are long (i.e. showing a surplus in their balance group) will receive 80 €/MWh.
<sup>3</sup> FFFF Decision on 50000 cm for a surplus in their balance for a surplus in the surplus in t

<sup>&</sup>lt;sup>3</sup> EFET Position on ERGEG Draft Guidelines of Good Practice for Electricity Balancing Markets Integration, 07/2006