



# Electricity Balancing Network Code

*By email to: [grendon.thompson@ofgem.gov.uk](mailto:grendon.thompson@ofgem.gov.uk)*

27 August 2013

Grendon Thompson  
Senior Economist  
Ofgem  
9 Millbank  
London  
SW1P 3GE

Dear Grendon,

## **ELEXON's thoughts on the implementation and impact of the European Electricity Balancing Network Code (EBNC) in GB**

ENTSO-E has recently concluded its first and only public consultation on the draft European Electricity Balancing Network Code (EBNC).

ELEXON, as the Balancing and Settlement Code (BSC) Company for Great Britain, has responded to that consultation in a number of areas and we attach a copy of that response for your information.

The ENTSO-E consultation format is aimed at eliciting comments on the detailed drafting of the EBNC in a pan-European context and does not easily permit the inclusion of views of a broader nature, or specifically what it might mean for individual Member States in implementation terms. While compiling our response to ENTSO-E, we identified a number of potential impacts on the current BSC arrangements, but it did not seem appropriate to include these in our response to ENTSO-E, as they related to the detail of EBNC implementation within Britain rather than comments on the proposed drafting of the EBNC.

We therefore provide these observations to you in this letter, which we hope you will find helpful.

We are copying this letter to Alex Haffner, BSC Development Manager at National Grid, and Graham Hathaway, who is on the ENTSO-E EBNC drafting team for National Grid. We also intend to publish this letter on our website, as our consultation response to ENTSO-E has been. The views expressed in this response are those of ELEXON Limited alone, and do not seek to represent those of BSC Parties.

All our comments are based on the published consultation draft of the EBNC (version 1.22 dated 29 May 2013). We are aware that the EBNC continued to develop through the consultation period but have not had sight of later versions.



# Electricity Balancing Network Code

## Detailed observations on the draft EBNC as it might impact the current BSC arrangements

These observations are in no particular order.

### Administration of imbalance settlement and settlement of balancing energy – and the role of Designated Entities such as ELEXON (see Articles 2, 8, 11, 12, 14, 16, 34, 35, 37, 38, 39, 47, 49, 50, 54 of the draft EBNC)

Article 11 (4) of the consultation version of the draft EBNC states:

“4. Notwithstanding paragraph 1, each Connection Transmission System Operator shall be entitled to delegate all or part of the tasks, including the responsibility for performing these tasks subject to National Regulatory Authority approval, necessary for the application of Imbalance Settlement between the Connection Transmission System Operator and the Balance Responsible Party, pursuant to CHAPTER 5 SECTION 4, to a Designated Entity. In case of the delegation of selected tasks only:

- (a) the Transmission System Operator shall remain responsible for all tasks related to Imbalance Settlement;
- (b) the delegating Transmission System Operator shall monitor the compliance with delegated tasks; and
- (c) the delegating Transmission System Operator shall ensure that suitable confidentiality arrangements have been put in place prior to delegation.”

What Article 11(4) appears to state in GB terms is that National Grid (the “Connection Transmission System Operator”) may “delegate” imbalance settlement to a Designated Entity subject to the Authority’s approval. We note that these arrangements are not the same as the current Transmission Licence/BSC arrangements applicable in GB.

In particular, under the EBNC as currently drafted:

- It is National Grid, as the Connection Transmission System Operator, who decides whether imbalance settlement is: undertaken by itself; delegated to BSCCo (ELEXON); or is delegated to another entity. The default position is that imbalance settlement is undertaken by National Grid unless National Grid decides to delegate it and the Authority approves this. The EBNC does not appear to require the Authority to approve a decision not to delegate. This does not clearly fit with current GB governance, where National Grid’s Transmission Licence requires it to maintain the BSC and the BSC itself establishes BSCCo (and where changes to either of these documents are approved by the Authority). A requirement to transfer some or all of ELEXON’s existing imbalance settlement processes and systems to National Grid as a result of the EBNC as currently drafted would result in impacts and costs to GB participants (and therefore ultimately costs to GB consumers), with no obvious benefit to the EBNC’s objectives for balancing markets or social welfare.



# Electricity Balancing Network Code

- The settlement of what the EBNC calls “balancing energy” (i.e. Bids and Offers in a GB context) is not part of the defined activities that the EBNC permits to be delegated. ELEXON currently undertakes Bid-Offer settlement in accordance with the BSC, however the EBNC appears to require it to be undertaken by National Grid directly unless the EBNC is amended to require its delegation should the National Regulatory Authority so decide. There are also other activities within the BSC (such as receiving notifications of contract positions) which ELEXON currently undertakes but which the EBNC does not currently permit National Grid to delegate. As above, a requirement from the EBNC as currently drafted to transfer some or all of ELEXON’s existing BSC processes and systems to National Grid would result in impacts and costs to GB participants (and therefore ultimately costs to GB consumers), with no obvious benefit to the EBNC’s objectives for balancing markets or social welfare.
- If National Grid did choose to delegate imbalance settlement to BSCCo (ELEXON) and the Authority approved that delegation, it is unclear whether ELEXON as BSCCo could further “delegate” activities to settlement agents as currently required by the BSC.
- Unless the proposed requirements EBNC are amended, National Grid will retain responsibility for, and must monitor compliance with, any delegated tasks. This does not fit well with existing BSC governance, where the BSC Panel is responsible for ensuring the proper, effective and efficient discharge of the BSC.

In summary, we believe that the draft EBNC does not clearly fit with the current GB licence and institutional arrangements for imbalance settlement and bid/offer settlement and could require significant changes to be made to the current GB governance arrangements with no obvious benefit for GB or European consumers or markets.

In our response to the ENTSO-E consultation we have, therefore, suggested EBNC drafting amendments to permit, as far as is possible, the current GB BSC governance and licensing arrangements to be retained, should the Authority wish for that outcome.

## Reporting of Energy contracts (Article 14)

Article 14 (2) of the draft EBNC requires a Balance Responsible Party’s Position (which in our interpretation of the Framework Guidelines means a contracted position not a Final Physical Notification) to be submitted to the Transmission System Operator.

As noted under our comments on Article 11(4) above, a requirement to move this process to National Grid under the EBNC as currently drafted would appear an inefficient and unnecessary change. It would require BSC Trading Parties to submit all contract notifications to National Grid instead of the BSC Energy Contract Volume Aggregation Agent (ECVAA). However, assuming that National Grid delegates imbalance settlement activities to ELEXON, National Grid would then simply pass the notifications on to the ECVAA anyway.

## Design of Imbalance Settlement (Articles 6, 7, 47 to 50)

Under the draft EBNC, Article 47(1), Transmission System Operators become the prime parties charged with responsibility for designing the Imbalance Settlement mechanism. Under the current BSC process, BSC Modification Proposals can, with certain exceptions, be initiated by any stakeholder and the Authority can launch a Significant Code Review resulting in BSC Modification Proposals. It is not entirely clear that the proposed



# Electricity Balancing Network Code

European process and current GB process align. If not, and the Authority wished to allow the current GB stakeholders to continue to raise modifications, we believe a new provision would need to be inserted in the EBNC.

We haven't drafted such a provision, but we have proposed amendments to Articles 6 and 7 to ENTSO-E, to propose that Imbalance Settlement as developed by Transmission System Operators pursuant to Articles 47 to 50 inclusive, is subject both to public consultation and approval by the National Regulatory Authority, which would, if adopted, go part way to allowing stakeholders a voice in the design, but does not yet allow them to initiate design changes.

## **Recovery of Costs by Designated Entities (Article 4)**

Article 4 of the draft EBNC requires that costs to be borne by (amongst others) Designated Entities shall be assessed by National Regulatory Authorities. We assume, although it is not entirely clear, that this allows Ofgem to continue to set National Grid's cost-recovery through its regulated price control and ELEXON's cost-recovery through the BSC.

## **Publication of information (Article 8)**

Article 8(4) of the draft EBNC requires that Transmission System Operators publish certain information, e.g. on Specific Products. ELEXON already publishes a variety of Balancing Mechanism data provided by National Grid, including Bid Offer Acceptances, on the Balancing Mechanism Reporting System (BMRS) (see [www.bmreports.com](http://www.bmreports.com)) and we assume that the BMRS will continue to be an appropriate publication mechanism under the EBNC. If the EBNC drafting was interpreted as requiring the Transmission System Operator to undertake the act of publication directly, it would be inefficient and costly to require the Transmission System Operator to replicate what already exists.

## **Objectives of the Balancing Market (Article 9)**

Our assumption is that the EBNC objectives, in particular those in Article 9(2), do not require changes to the Applicable BSC Objectives as set out in the Transmission Licence. We assume that that compliance with the EBNC (and EBNC objectives) can be achieved through existing Applicable BSC Objective (e), since this refers to "compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency [for the Co-operation of Energy Regulators]" (i.e. the European Third Package from which the EBNC originates).

## **Settlement of Imbalances (Article 16(7))**

Article 16(7)(b) of the draft EBNC only allows that imbalances can be settled with the Connection Transmission System Operator and not with the Designated Entity. If this requirement is left unchanged, it is not clear that imbalance settlement as currently undertaken under the BSC, would be permissible. Currently imbalances are charged or paid though ELEXON Clear and then shared amongst BSC Trading Parties as part of the Residual Cashflow Reallocation Cashflow and not with the Transmission System Operator. See our previous comments on Article 11 (4).



# Electricity Balancing Network Code

## Balancing and settlement during contingency events

The current BSC (Section G) caters for contingency events including Black Start and the exercise by the Secretary of State of certain powers under British national legislation including the Fuel Security Code. These situations do not appear to be considered in the draft EBNC. We have been informed that emergency situations will be covered in a separate, future, Network Code but, until this is drafted, we are unsure how consistency between the GB BSC rules and the Network Codes will be assured. For example, BSC section G3.2 requires variation of the normal rules during black start periods, including, in some circumstances<sup>1</sup>, the suspension of the balancing mechanism and of contract notifications and the application of a single imbalance price.

## The continued existence of the GB Balancing Mechanism

Article 17(6) of the EBNC allows a Member State to retain Specific Products which are not standardised across Europe. Article 19 allows the Transmission System Operator to convert Specific Product bids into Standard Product bids for use in a Co-ordinated Balancing Area between Transmission System Operators of different Member States.

We assume that given the historic investment of GB participants in the GB Balancing Mechanism, GB participants will wish to retain GB Balancing Mechanism Bids and Offers as Specific Products if possible. We assume that this requires the Authority to approve these as Specific Products in accordance with Article 17(6).

The GB Balancing Mechanism is, of course, currently 'pay as bid' while the EBNC's proposed CoBA balancing mechanism will be 'pay as cleared' unless Transmission System Operators demonstrate that a different pricing method is more efficient for EU-wide implementation (Article 25(2)).

At a practical level, we therefore envisage a two-tier balancing mechanism post EBNC implementation, whereby:

- GB participants continue to submit 'pay as bid' Bids and Offers into the GB Balancing Mechanism as Specific Products;
- National Grid converts these Bids and Offers into Standard Product bids and offers for the CoBA balancing mechanism;
- Any accepted Standard Product bids and offers are settled between Transmission System Operators in the CoBA as 'pay as cleared'; and
- National Grid then converts back any such acceptances into GB Balancing Mechanism Bid-Offer Acceptances.

In this scenario, if no further changes were made, there could be 'pay as bid' Specific Product acceptances and 'pay as cleared' Standard Product acceptances and we have not sought to develop the payment mechanisms further, as it would not be appropriate for us to do so, but merely to note this feature of two-tier balancing with different payment rules. But in general, we assume that the GB Balancing Mechanism could continue to exist

---

<sup>1</sup> Under the current Balancing and Settlement Code (BSC) the electricity market is suspended following a partial or total shutdown of the transmission system. Approved BSC Modification P276 will introduce an additional threshold into the BSC which would have to be met before the market will be suspended following a partial shutdown. P276 is to be implemented in March 2014.



# Electricity Balancing Network Code

largely in its current form, but with consideration of whether, and if so, how 'pay as bid' and 'pay as clear' settlement rules should operate.

## The pricing of Bids and currency conversion (Article 27(5))

According to Article 2 of the draft EBNC (definition of "Price of Bid"), prices shall be in Euros per MWh. This is clearly necessary in order to compare Standard Products on Common Merit Order Lists and, if adopted, marginal pricing for Balancing Energy Standard Products as foreseen by Article 25(2). There is therefore a currency issue to be considered given that the UK has not adopted the Euro.

Article 27(5) requires that Transmission System Operators shall submit all Balancing Energy Bids (presumably both Standard and Specific Products) unmodified. As written this could be read to require that the GB Balancing Mechanism converts fully to Euros as the Transmission System Operator is not permitted to modify any bid by Article 27(5). We suspect that this was not what was intended. Article 19 may allow for conversion and it may be appropriate to allow the conversion from local currency to Euros rather than insist that Balancing Service Providers (BSPs) always bid in Euros if this is not the national currency of the Member State where the Balancing Service Provider is located.

But we flag it as an issue because at some point in the process either the Balancing Service Provider or the Transmission System Operator or the Activation Mechanism will need to convert prices into Euros for comparison with other Bids from elsewhere in Europe. Upon activation the payments made will then (again at some point in the process) need to be converted back into the local currency, e.g. Sterling.

One interpretation of the draft EBNC is that a Bid priced in Sterling could be classed as a Specific Product even if it otherwise met the requirements of a Standard Product, so it may be important to allow Specific Products to exist in perpetuity.

## The continued existence of Interconnector Users (Article 34(4))

With the implementation of the EBNC, it appears that Interconnector Users as currently exist in the BSC, who act essentially as Balance Responsible Parties (BRPs) for interconnector flows, may cease to exist. The [EBNC Supporting Document](#) states, with reference to Article 47 of the draft EBNC, that "interconnectors, however, cannot be covered by BRP".

At the end of July, ACER published a document on "[Capacity Remuneration mechanisms and the internal market for electricity](#)". Paragraph B5 states: "Once market coupling is implemented it is no longer possible to distinguish which market participant exports and/or imports...".

However, this conclusion is not at all clear to us. Under the European Target Model we have, in different time frames, explicit and implicit market coupling across Interconnectors. Clearly with any form of explicit trading across Interconnectors there will be parties who have traded across interconnectors who can be identified. Even with implicit market coupling, the counterparty to all trades across interconnectors must presumably be a power exchange; and so a power exchange can be identified as responsible for certain cross-Interconnector power trades. Without this identification it is unclear who is identified as the party that is the counterparty to an energy trade in GB, for example when the contracted generation exceeds the contracted demand within GB and results in what is essentially a contracted energy flow export from GB across the interconnector.



# Electricity Balancing Network Code

At a basic level, traded positions across Interconnectors may not match physical flows. These energy imbalances need to be accounted for, but under the EBNC as drafted we are unclear as to who has the responsibility for such imbalances (i.e. who is the Balance Responsible Party for Interconnector trades?)

## Imbalance Adjustments due to the activation of Balancing Services (Articles 16 and 39)

Articles 16(2)(d) and 39 of the draft EBNC appear to require an adjustment to imbalance in relation to every Balancing Service.

Currently, under the BSC, we make such adjustments for Bid Offer Acceptances but not (for example) non-BM Short-Term Operating Reserve (STOR). In this case, suppose a customer has a STOR contract and is instructed to reduce their output. Their Supplier has potentially bought energy for the customer, which the customer no longer wants. Currently the Supplier is paid the cash-out price for that energy (as it would if the customer reduced demand for any other reason, e.g. plant fault or industrial action).

The draft EBNC removes the imbalance payment to the Supplier. In the current GB model, the Supplier is not a party to the balancing services contract between Transmission System Operator and customer. However, as the Balance Responsible Party under the EBNC, the Supplier's imbalance position will be adjusted.

We do not comment as to whether this change is appropriate, but have highlighted this apparent impact to the BSC's Supplier Volume Allocation Group (SVG) through paper [SVG150/07](#).

## Definition of Position (Article 2)

The following commentary is largely taken from our response to ENTSO-E, but it is very important for the potential impact on existing GB arrangements, so we are also flagging it in this letter. We believe in an effort to allow Member States to maintain their current different definitions of imbalance, there is a risk that imbalances will be incorrectly defined as compared with the Framework Guidelines and, worse, will allow for double counting.

We have suggested the following changed (red-lined) definition of Position:

Position means a sum of commercial trades, ~~and physical injections and withdrawals were appropriate,~~ of a Balance Responsible Party in a relevant Imbalance Settlement Period.

The definition of Position in the draft EBNC, when combined with the definition of Allocated Volume to give Imbalance, is not consistent with the [Framework Guidelines'](#) definition of Imbalances. The [Supporting Document's](#) description of Position (on page 12) is also inconsistent with the Framework Guidelines on this point. Physical injections/withdrawals already appear in the definition of Allocated Volume (which we understand to be a physical delivered position). Additionally including these in the definition of Position (which we understand to be a commercial traded position) therefore gives the potential for double-counting of physical volume and an erroneous Imbalance calculation, as well as being inconsistent with the Framework Guidelines.



# Electricity Balancing Network Code

For example, consider a generator (acting as their own Balance Responsible Party) who sells 100 MWh but only generates 80 MWh (i.e. a shortfall of 20 MWh). In order to achieve consistency with the Framework Guidelines' definition of Imbalances this Balance Responsible Party should have an Allocated Volume of +80 MWh, a Position of +100 MWh, and an Imbalance of -20 MWh. Including the physical injection of 80 MWh in the Position (as allowed for by the current definition) would not lead to a correct calculation of Imbalance.

## Single or Dual Imbalance Prices? (Article 50)

The [Supporting Document](#) states in its description of Article 47 on page 58 that: "An Imbalance Price shall be calculated for each direction, these prices may however be the same, thus allowing for single pricing."

However, we are not convinced that the wording of Article 50 in fact allows for single pricing, which given Ofgem's recent [Electricity Balancing Significant Code Review - Draft Policy Decision](#) stating Ofgem's draft policy proposal for single imbalance pricing, is clearly of some importance. This is down to a lack of clarity in the drafting as to whether a shortage or surplus refers to the Balance Responsible Party's imbalance or the system's imbalance; and also to the mixing of actions and avoided actions in a single paragraph.

Article 50(2) states that each Transmission System Operator "shall determine an Imbalance Price for each Imbalance direction, shortage or surplus and for each Imbalance Settlement Period for each Relevant Area". Since Imbalance is defined in Article 2 by reference to the imbalance of an individual Balance Responsible Party, then this implies dual imbalance pricing unless the price in each direction is the same.

Articles 50(3), 50(4) and 50(5), which set out the principles behind the calculation of Imbalance Prices are not particularly clear. So we have attempted to reword them in our response to ENTSO-E, so that they align with what we believe to be the intention as set out in the Supporting Document.

## System and Energy Balancing costs in Imbalance Prices? (Article 50)

Articles 50(3) and 50(4) imply that actions that are currently classed as system balancing actions under the GB BSC arrangements, and therefore excluded from the main imbalance price, will now be included in the Imbalance Price under the EBNC.

This is because, for example, according to the [Supporting Document](#) (page 40) Frequency Restoration Reserves are defined to last no longer than 15 minutes, and under the EBNC are included in the Imbalance Pricing principles. But, under the BSC such short duration actions would be excluded by the Continuous Acceptance Duration Limit (CADL) parameter which is currently set at 15 minutes. We assume that either the BSC would be changed or the BSC Panel would need to propose to the Authority that CADL be set to zero if the draft EBNC requirements on this point are unchanged. And the EBNC's definition of Balancing is "all actions and processes, on all timescales" could therefore be read as meaning that the very small volume actions (<1MWh) which the BSC currently removes through the De Minimis Acceptance Threshold (DMAT) will also need to be included in the imbalance price calculation. If so, we assume that the BSC Panel may also need to propose that DMAT be set to zero.

In addition, we note that the formulation of the imbalance price in Article 50 does not appear to meet the [Framework Guideline](#) requirement that "imbalance pricing shall not include additional costs linked to possible



# Electricity Balancing Network Code

deviations from the merit order list to alleviate congestions internal to a control area". We have not proposed any words for this to ENTSO-E, but we have noted it. Including system balancing costs (including those to alleviate constraints) would clearly have an impact on GB imbalance prices.

## Harmonisation of Imbalance Settlement Period (Article 48)

Article 48 requires all Transmission System Operators, within three years of the EBNC's entry into force, to submit to all National Regulatory Authorities and the Agency a cost-benefit analysis on harmonisation of the Imbalance Settlement Period across Member States.

If this resulted in any proposal to adopt a shorter Imbalance Settlement Period than that currently used in GB (e.g. 15 minutes), it is unclear to us from the draft EBNC whether the impact of this could extend to metering arrangements. A proposal for GB to adopt 15-minute metering could have a significant impact on the Government's Smart Metering Implementation Programme as well as the BSC and Distributor/Supplier billing arrangements.

### *In conclusion*

We will endeavour to support DECC, Ofgem, National Grid and GB industry participants in ensuring that the EBNC requirements are implemented in the most efficient way possible.

At this stage of the EBNC's development, we have identified and shared our views on potential GB BSC impacts and any threats that the EBNC drafting (if unchanged) may pose to an efficient GB implementation of the EBNC.

If you wish to discuss this further, or have any questions about the thoughts we have set out in this letter, please contact me on 020 7380 4253 or by email at [steve.wilkin@elexon.co.uk](mailto:steve.wilkin@elexon.co.uk).

Yours sincerely

**Steve Wilkin**  
**Senior Market Advisor, ELEXON**

cc. Alex Haffner, BSC Development Manager, National Grid  
Graham Hathaway, Market Operation, National Grid