

## P323 'Enabling inclusion and treatment of SBR in the Imbalance Price'

P323 proposes to enable the value of Supplemental Balancing Reserve (SBR) to be included in the imbalance price calculation without affecting Balancing Mechanism (BM) cash flows. The Proposer seeks to have this in place by 5 November 2015 in line with the implementation of approved Modification Proposal [P305 'Electricity Balancing Significant Code Review Developments'](#). This is because it is necessary that other elements of P305 are in place (e.g. the Value of Lost Load (VoLL) price) and to avoid delays so that the market receives the appropriate signals.



ELEXON recommends P323 is progressed to the Assessment Procedure for an assessment by a Workgroup

This Modification is expected to impact:

- the Transmission Company
- ELEXON

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## About This Document

This document is an Initial Written Assessment (IWA), which ELEXON will present to the Panel on 9 July 2015. The Panel will consider the recommendations and agree how to progress P323.

There are two parts to this document:

- This is the main document. It provides details of the Modification Proposal, an assessment of the potential impacts and a recommendation of how the Modification should progress, including the Workgroup's proposed membership and Terms of Reference.
- Attachment A contains the P323 Proposal Form.



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# 1 Why Change?

## Current arrangements

In December 2013, Ofgem published its decision to accept an application by the Transmission Company (TC) to introduce two new balancing services: SBR and Demand Side Balancing Reserve (DSBR).

The existing arrangements under the Balancing and Settlement Code (BSC) and Transmission Licence Standard Condition [C16 'Statements of the Transmission Licence'](#) prevent both SBR and DSBR from feeding into the calculation of imbalance prices.

## SBR

The [System Management Action Flagging \(SMAF\) Methodology Statement](#) sets out which actions will be System Operator (SO)-flagged. It classes SBR actions as being 'System Management'. This means that if the SBR service is used an SO-flag it will be applied to any resulting action so that the associated volume will be classified as a 'first stage flagged' balancing action. The action will then become unpriced if it has a more expensive price than the most expensive energy balancing action in that Settlement Period.

The current arrangements do not allow a system action's price to vary depending on whether it is being used in the imbalance price calculation or BM cashflow. P305, amongst other things, will allow this differentiation for Short Term Operating Reserve (STOR) actions.

## DSBR

The [Balancing Services Adjustment Data \(BSAD\) Methodology Statement](#) sets out what SO actions are taken outside of the BM to balance the system. This excludes the volumes and prices associated with accepted DSBR services from the imbalance price calculation.

## Background

### Issue 56

The TC considered the current arrangements and noted that if DSBR and SBR was used over winter 2014/15, the price would not reflect accurately all of the TC's costs.

The TC raised [Issue 56 'Treatment of the new SBR and DSBR services in the imbalance price'](#) to consider the current arrangements. It noted that, if DSBR and SBR were used over winter 2014/15, and not reflected in the imbalance price, the price would not accurately reflect all of the TC's costs.

## Conclusions

The majority of the Issue 56 Group recommended that:

- DSBR and SBR actions should be reflected in the imbalance price.
- Any solution taken forward for pricing DSBR actions should also apply to SBR actions. However, the progression of any solution should be split to allow the DSBR solution to be implemented ahead of winter 2014/15.



### What are balancing services?

Balancing services are used by the TC in its role as SO to balance supply and demand in real time. These are also used in the calculation of imbalance prices (also known as cash-out prices).



### What is the SBR service

The SBR makes available generation that would otherwise be unavailable in the market. This generation is held in reserve and only be used in the unlikely event that there is insufficient generation capacity available in the market to meet demand.



### What is the DSBR service?

The DSBR service is a simple, low cost solution to stimulate rapid growth in the provision of demand-side services to the SO. The service is aimed at non-domestic consumers with the ability to reduce demand/load shift or run small embedded/on-site generation for at least an hour during the winter evening peak. This enables the SO to ask large energy users to reduce their demand in exceptional circumstances and remunerates them for doing so.

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- If a change is required to the BSC to allow DSBR actions to be reflected in the imbalance price, an Urgent Modification should be progressed. However, Issue 56 also concluded that a change was not necessary.

DSBR and SBR actions should be priced at VoLL, which should be set at £3,000 to be consistent with Ofgem's Electricity Balancing Significant Code Review (EBSCR) Policy.

## Development of conclusions

Following the Issue 56 Group meeting, ELEXON and the TC discussed how best to progress the Issue Group's recommended solution. ELEXON advised the TC and the Issue Group that if the recommended solution were to be taken forward it would not require a change to the BSC. However, in order to progress the solution a change would need to be made to the BSAD Methodology Statement. It was identified that in order for any solution to work in practice it would require manual workarounds to be put in place as the systems owned by the TC could not be changed in time for winter 2014/15.

On 14 July 2014, the TC issued an [open letter](#) to the industry about the next steps to be taken regarding the treatment of DSBR and SBR actions in the imbalance price.

Views from industry reflected the conclusions of the Issue 56 group, namely:

- In principle as DSBR and SBR are seen as emergency actions to avoid demand control, they should be considered a proxy for demand control and priced at VoLL. This principle should only apply if P305 is implemented.
- Several parties were concerned about potential distortion of the BM due to the timings of dispatch instructions (which may be initiated ahead of Gate Closure).

Further information on Issue 56 can be found on the [Issue 56 page](#) of the ELEXON website.

## EBSCR and P305

Ofgem did not include the pricing of SBR and DSBR in the scope of the EBSCR, but it noted that this may be considered through a separate Modification. It also noted, that based on consultation responses, there was a case for treating SBR and DSBR in the same way as Demand Control actions, as the intention of these services is for them to be treated as last resort substitutes for Demand Control actions.

The TC therefore did not include SBR and DSBR in the scope of P305, which, amongst other things, focused on STOR and Demand Control actions. However, a P305 Workgroup member did query the treatment of SBR and DSBR. They felt that scarcity pricing should be applied more generally to all Settlement Periods, and not just those in STOR Windows.

Other members responded that the Reserve Scarcity Price (RSP), proposed as part of P305, is only being applied to STOR Actions as these are the only actions that aren't priced at the time of use.

The Authority approved P305 on 2 April 2015 for implementation on 5 November 2015. Further information on P305 can be found on the [P305 page](#) of the ELEXON website.

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## TC-led workshop and second TC Open Letter

On 10 February 2015, the TC held a workshop to revisit the issue with respect to winter 2015/16. The attendees largely agreed with the views expressed by the Issue 56 Group and by the respondents to the first TC Open Letter, with the following distinctions:

- For DSB, opinion was split between whether actions should be priced at VoLL (£3,000) or at the utilisation price capped at VoLL.
- For SBR, treatment of actions for ramping periods up to and down from the Stable Export Limit (SEL) should not be priced at VoLL. Whilst not unanimous, the suggestion that gained most support was to price these periods using the RSP that is due to be delivered with P305.

On 15 June 2015, the TC sent a second [open letter](#) to the industry to seek views on its proposals to incorporate SBR and DSB actions into the imbalance price from November 2015.

## What is the issue?

The standard condition C16 prevents both SBR and DSB from feeding into the calculation of imbalance prices. The BSC is silent on the inclusion of SBR, so therefore would not prevent it. However, if this was included it would be at the utility price. Additionally, the BSAD methodology does not include DSB. Therefore, the issue is that the BSC does not allow a system action (rather than a Balancing Service Adjustment Action (BSAA) in BSAD) to be priced at one value for BM cashflow and at a different value for the imbalance price calculation.

Since SBR and DSB will only be called upon at times of severe system scarcity, factoring these services' accepted actions into imbalance prices is necessary in order to ensure accurate signalling of scarcity to the market. This is consistent with the intent of the Ofgem's EBSCR reforms.

## Change to C16 methodologies

In order to enable the TC to include SBR and DSB actions in the imbalance price calculation it must modify its SMAF Methodology Statement and BSAD Methodology Statement. These are statements required by Standard Condition C16 of the TC's Licence. The extent of these necessary changes is set out in the TC's open letter published on 15 June 2015. P323 is conditional on the outcome of the C16 review.

### Proposed solution

Currently, whenever SBR this is dispatched, the TC will send a notification to ELEXON. This notification will identify the BOA(s) that were dispatched for SBR purposes<sup>1</sup> and which should be priced at VoLL in the imbalance price calculation. This will be done as soon as possible but no later than the end of the next Working Day (WD) following the SBR dispatch.

BSC Section T explains how System Actions are derived from BOAs and associated BOA Data. These System Actions consist of a volume of energy in MWh and a related System Action Price. For the purposes of the Main Price calculation only, the System Actions derived from a BOA that was dispatched for SBR purposes will have its System Action Price re-priced at VoLL. Where a System Action has been re-priced equal to VoLL, it will be known as an 'SBR System Action' and the resulting System Action Price will be known as the 'SBR Action Price'.

Where part of a BOA is considered an SBR Action, the part that is not related to SBR will continue to be known as a Buy Action and will be priced according to the original Offer Price (PO).

Irrespective of whether a BOA is dispatched for SBR purposes, the original POs associated to the BOA will continue to be used for the purposes of BM cashflow.

The intention of P323 is for the proposed solution to be similar to the approach to re-pricing System Actions from STOR Providers (as set out by P305). Under P305, System Actions determined to be STOR Actions, are re-priced to equal the RSP for the purposes of the imbalance price calculation only, and the original PO(s) are used for BM cashflow.

### Manual process solution

In order to ensure that P323 can be implemented in time for the November 2015 BSC Release (as requested by the TC), no BSC System changes are proposed under this Modification, for reasons provided below:

- SBR and DSBP are last resort activities and in general are unlikely to be dispatched regularly<sup>2</sup>;
- SBR and DSBP are intended as temporary measures available to the TC whilst the Electricity Market Reform (EMR) is implemented<sup>3</sup>, which means that the benefits of system changes would be time-limited;
- there is limited time left to make changes to BSC Systems; and
- the scheduled November 2015 Release already contains a large number of significant changes to BSC Systems, e.g. P305, therefore any additional BSC System changes would pose a risk to implementation.

<sup>1</sup> In order to dispatch SBR from an SBR provider the TC accepts Offers submitted by the provider in accordance with the Grid Code. The TC accepts certain Offers from the SBR provider to ensure it is operating at its SEL (so it is ready to provide SBR) and accepts other Offers that push the provider beyond its SEL and therefore provide SBR.

<sup>2</sup> SBR and DSBP were procured for the first time for use during the 2014/15 winter but were not called on.

<sup>3</sup> The EMR arrangements are intended to be in place by 2019.

In practice, should the TC dispatch SBR and notify ELEXON of relevant affected BOAs, then ELEXON will recalculate the imbalance price using a solution that replicates the requirements in Section T but that does not require the use of BSC Systems. By comparing the re-calculated imbalance price with the price originally calculated by BSC Systems (i.e. those that will not re-price actions for SBR) the difference between the two prices will determine an adjustment to the Buy Price Adjuster (BPA). By adjusting the BPA and resubmitting it to BSC Systems, the price originally calculated by BSC Systems will be corrected to reflect the price BSC Systems would have calculated if it had re-priced the SBR Action.

There is precedence for this approach to manually adjusting imbalance prices at the time of market opening. In particular, Modifications [P10 'Eliminating Imbalance Price Spikes Caused By Truncating Effects'](#) and [P18 'Removing / Mitigating The Effect of System Balancing Actions in The Imbalance Price'](#).

Because the TC will notify ELEXON of SBR BOAs after the end of a Settlement Period, the re-calculation of the imbalance price will take effect after the Balancing Mechanism Reporting Agent (BMRA) has produced its indicative prices and published these on the Balancing Mechanism Reporting Service (BMRS) (i.e. within 15 minutes of the end of the Settlement Period). Whilst the BMRA's indicative price calculation would not reflect any SBR Action, it is expected that any re-calculation and adjustment (as described above) would take place in time for the SAA's Interim Information (II) Run price calculation and all subsequent Reconciliation Runs.

If the Workgroup, the Panel or the Authority believe that system changes will be required in the future, a Change Proposal can be raised to progress them.

## Applicable BSC Objectives

P323 aims to ensure that the value of SBR is reflected in the imbalance price calculation. It also is intended to ensure that the BSC aligns with the proposed changes to the C16 methodologies, which will enable the TC to include SBR and DSBR actions in the imbalance price calculation.

The Proposer believes that P323 better facilitates **Applicable BSC Objective (a)** as it will enable proposed changes to C16 methodology statements to have practical effect. The changes proposed under the C16 process as per the Transmission Licence cannot be efficiently discharged in relation to SBR without P323. Therefore the Proposer believes P323 enables the discharge of TC's duties under C16 of the Licence.

## Implementation approach

The Proposed Implementation Date for P323 is:

- 5 November 2015 (November 2015 BSC System Release), if a decision is received on or before 29 October 2015; or
- 10 WDs following the Authority decision, if a decision is received after the 29 October 2015.



### What are the Applicable BSC Objectives?

(a) The efficient discharge by the Transmission Company of the obligations imposed upon it by the Transmission Licence

(b) The efficient, economic and co-ordinated operation of the National Electricity Transmission System

(c) Promoting effective competition in the generation and supply of electricity and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity

(d) Promoting efficiency in the implementation of the balancing and settlement arrangements

(e) 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]

(f) Implementing and administering the arrangements for the operation of contracts for difference and arrangements that facilitate the operation of a capacity market pursuant to EMR legislation

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### 3 Areas to Consider

In this section we highlight areas which we believe the Panel should consider when making its decision on how to progress P323, and which a Workgroup should consider as part of its assessment of P323. We recommend that the areas below form the basis of a Workgroup's Terms of Reference, supplemented with any further areas specified by the Panel.

#### Areas to consider

The table below summarises the areas we believe a Modification Workgroup should consider as part of its assessment of P323:

Areas to Consider
Is the proposed solution the most appropriate way to implement the change?
Should ELEXON submit the adjustment value directly to the SAA to adjust the BPA it will have received from the TC or should ELEXON submit the adjustment to the TC so it can update the BPA and resubmit it to the SAA?
In light of the nature and timing of any recalculation for SBR, how should details of the event and subsequent calculations be provided to Parties?
Are the risks associated to the proposed manual process acceptable for dealing with what is likely to be a rare event until an enduring solution to reserve scarcity is put in place (i.e. the point at which EMR proposals are fully implemented in 2019)?
Consider whether a separate Change Proposal be raised to implement BSC System changes for the 2016/17 winter period.
What impacts are associated with this change?
What changes are needed to BSC documents, systems and processes to support P323 and what are the related costs and lead times?
Are there any Alternative Modifications?
Does P323 better facilitate the Applicable BSC Objectives than the current baseline?

## 4 Proposed Progression

### Next steps

We recommend that P323 is progressed to the Assessment Procedure for three months assessment by a Workgroup.

### Workgroup membership

We recommend that the Workgroup membership be formed of experts on imbalance prices and their calculation methodologies. In particular, we believe that members of the P305 Workgroup and Issue 56 Group should be invited. The Workgroup should also be open to any other relevant experts and interested parties.

### Timetable

We recommend that P323 undergoes a three month Assessment Procedure, with the Assessment Report being presented to the Panel at its meeting on 10 September 2015.

We believe that the Workgroup will need to undertake the activities shown in the table below, which includes a 15 WD Assessment Procedure consultation. Due to the need to implement in November 2015 (in time for winter 2015/16), the timetable allows for an 11 WD Report Phase Consultation.

Proposed Progression Timetable for P323	
Event	Date
Present Initial Written Assessment to Panel	09 Jul 15
Workgroup Meeting	14, 17 or 20 Jul 15
Workgroup Meeting ( <i>if required</i> )	24 Jul 15
Assessment Procedure Consultation	27 Jul – 14 Aug 15
Workgroup Meeting	W/B 17 Aug 15
Present Assessment Report to Panel	10 Sep 15
Report Phase Consultation	11 Sep – 25 Sep 15
Present Draft Modification Report to Panel	08 Oct 15
Issue Final Modification Report to Authority	09 Oct 15

## 5 Likely Impacts

### Impact on BSC Parties and Party Agents

Party/Party Agent	Potential Impact
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None identified at this time, though Trading Parties may be impacted by SBR dispatching. The P323 Assessment Consultation will identify any specific impacts on BSC Parties and Party Agents.
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### Impact on Transmission Company

The TC will notify ELEXON or the Settlement Administration Agent (SAA) when SBR is dispatched.

### Impact on BSCCo

ELEXON or SAA will receive the notification of SBR dispatch and manually process the changes to the imbalance price calculations.

### Impact on BSC Systems and processes

BSC System/Process	Potential Impact
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SAA	ELEXON or the SAA will receive the notification of SBR dispatch and manually process the changes to the imbalance price calculations.
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### Impact on Code

Code Section	Potential Impact
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Section Q	Changes would be required to implement this Modification.
Section T	

Section X Annex X-1	Add definitions
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### Impact on Code Subsidiary Documents

CSD	Potential Impact
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BSCP18	Changes would be required to implement this Modification.
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### Other Impacts

Item impacted	Potential Impact
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BSAD Methodologies Statement	The changes to the treatment of SBR will be captured via the Transmission Licence: C16 process through changes to the BSAD and SMAF methodologies and so this change will need to be consistent with changes made via this process.
SMAF Methodologies Statement	

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## 6 Recommendations

We invite the Panel to:

- **AGREE** that P323 progresses to the Assessment Procedure;
- **AGREE** the proposed Assessment Procedure timetable;
- **AGREE** the proposed membership for the P323 Workgroup; and
- **AGREE** the Workgroup's Terms of Reference.

## Appendix 1: Glossary & References

### Acronyms

Acronyms used in this document are listed in the table below.

Acronym	
Acronym	Definition
BM	Balancing Mechanism
BMRA	Balancing Mechanism Reporting Agent ( <i>BSC Agent</i> )
BMRS	Balancing Mechanism Reporting Service
BSAA	Balancing Service Adjustment Action
BSAD	Balancing Services Adjustment Data
BSC	Balancing and Settlement Code ( <i>Industry Code</i> )
BSCP	Balancing and Settlement Code Procedure ( <i>Code Subsidiary Document</i> )
DBSR	Demand Side Balancing Reserve
EBSCR	Electricity Balancing Significant Code Review
EMR	Electricity Market Reform
II	Interim Information ( <i>Settlement Run</i> )
IWA	Initial Written Assessment
PO	Offer Price
RSP	Reserve Scarcity Price
SAA	Settlement Administration Agent ( <i>BSC Agent</i> )
SBR	Supplemental Balancing Reserve
SEL	Stable Export Limit
SO	System Operator
STOR	Short Term Operating Reserve
TC	Transmission Company
VoLL	Value of Loss of Load
WD	Working Day

### External links

A summary of all hyperlinks used in this document are listed in the table below.

All external documents and URL links listed are correct as of the date of this document.

External Links		
Page(s)	Description	URL
1,4	P305 page on the ELEXON website	<a href="https://www.elexon.co.uk/mod-proposal/p305/">https://www.elexon.co.uk/mod-proposal/p305/</a>

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External Links		
Page(s)	Description	URL
3	Transmission Licence: Standard Licence Conditions on the Ofgem website	<a href="https://www.ofgem.gov.uk/licences-codes-and-standards/licences/licence-conditions">https://www.ofgem.gov.uk/licences-codes-and-standards/licences/licence-conditions</a>
3	SMAF Methodology Statement on the TC website	<a href="http://www2.nationalgrid.com/UK/Industry-information/Electricity-transmission-operational-data/Codes-principles-methodologies/Methodologies/">http://www2.nationalgrid.com/UK/Industry-information/Electricity-transmission-operational-data/Codes-principles-methodologies/Methodologies/</a>
3	BSAD Methodology Statement on the TC website	<a href="http://www2.nationalgrid.com/UK/Industry-information/Electricity-transmission-operational-data/Codes-principles-methodologies/Methodologies/">Bhttp://www2.nationalgrid.com/UK/Industry-information/Electricity-transmission-operational-data/Codes-principles-methodologies/Methodologies/</a>
3, 4	Issue 56 page on the ELEXON website	<a href="https://www.elexon.co.uk/smg-issue/issue-56/">https://www.elexon.co.uk/smg-issue/issue-56/</a>
4,5	C16 Open Letter consultations on the TC website	<a href="http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/Balancing-framework/C16-Consultations/">http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/Balancing-framework/C16-Consultations/</a>
7	P10 page on the ELEXON website	<a href="https://www.elexon.co.uk/mod-proposal/p010-eliminating-imbalance-price-spikes-caused-by-truncating-effects/">https://www.elexon.co.uk/mod-proposal/p010-eliminating-imbalance-price-spikes-caused-by-truncating-effects/</a>
7	P18 page on the ELEXON website	<a href="https://www.elexon.co.uk/mod-proposal/p018-removing-mitigating-the-effect-of-system-balancing-actions-in-the-imbalance-price/">https://www.elexon.co.uk/mod-proposal/p018-removing-mitigating-the-effect-of-system-balancing-actions-in-the-imbalance-price/</a>