

## Phase

Initial Written Assessment

Definition Procedure

Assessment Procedure

Report Phase

Implementation

## P399 'Making the identity of balancing service providers visible in the Balancing Services Adjustment Data'

This Modification seeks to add clarity and transparency to the bilateral trades taken by the National Electricity Transmission System Operator (NETSO) by identifying counterparties to bilateral trades between the NETSO and non-Balancing Mechanism (BM) Balancing Service Providers in the Balancing Services Adjustment Data notifications.



ELEXON recommends P399 is progressed to the Assessment Procedure for an assessment by a Workgroup

This Modification is expected to impact:

- BSC Parties
- Generators
- NETSO
- Virtual Lead Parties
- Balancing and Settlement Code Company (BSCCo)



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## About This Document

This document is an Initial Written Assessment (IWA), which ELEXON will present to the Panel on 16 January 2020. The Panel will consider the recommendations and agree how to progress P399.

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 P399 Proposal Form.

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# 1 Summary

## What is the issue?

Balancing Service Adjustment Data (BSAD) does not currently identify the counterparty involved in a Bilateral Contract with the National Electricity Transmission System Operator (NETSO). This leaves parties that bilaterally trade with NETSO outside the Balancing Mechanism (BM) anonymous. This gives the bilateral party an advantage, as they have information that the rest of the industry do not. This limits effective competition. Further, trades conducted within the BM are not anonymous therefore there is unnecessary inconsistency between BM and non-BM trades.

As the proportion of non-BM actions increases, an increasing volume and value of the system operation actions are becoming less transparent: this needs to be addressed.

## What is the proposed solution?

Modify [BSC Section Q 'Balancing Services Activities'](#) to require BSAD files to include a suitable identifier for assets providing balancing services to NETSO, resulting in non-BM trades having similar levels of transparency as BM trades, thus creating a level playing field for all Industry participants.

## Impacts

ELEXON expects **all BSC Parties** to be positively impacted in that there will be greater transparency of the balancing actions being undertaken by the NETSO. Data transparency will foster greater competition and allow for greater decision making, supporting new and innovative market strategies. Furthermore, improving transparency and equal access to data provides a level playing field for all current and future Market Participants. Where possible, the Workgroup will determine and quantify the benefits greater transparency and visibility of trades will bring to new and existing Parties.

Counterparties to bilateral trades (e.g. Virtual Lead Parties and Generators) and NETSO may need to amend their contracts to reflect this.

NETSO and the Balancing and Settlement Company (BSCCo) will be required to make system changes to accommodate any new field into the BSAD. A full assessment of the costs and impacts will be undertaken in the next stage in the Assessment Procedure.

## Implementation

As system changes will be required, the Proposer recommends an implementation date of 25 February 2021 as part of the scheduled February BSC Release. This is anticipated to allow enough time to make the necessary system changes following approval of this Modification.

## Recommendation

The Proposer believes this Modification should be progressed to the Assessment Phase to be considered by a Workgroup. At this stage the Proposer believes P399 should be submitted to Ofgem for decision (not Self-Governance).

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## 2 Why Change?

### Background

#### What is the Balancing Mechanism (BM)?

The Balancing Mechanism (BM) is one of the tools used by the NETSO to balance electricity supply and demand close to real time. It is needed because electricity cannot currently be stored at scale and must therefore be generated at the time of demand. Where the NETSO predicts that there will be a discrepancy between electricity production and demand during a certain time period, they may accept a 'bid' or 'offer' from a Market Participant to either increase or decrease generation (or consumption). The Balancing Mechanism is used to balance supply and demand in each half hour trading period (Settlement Period) of every day.

The operation of the BM relies on the flow of data and information between National Grid, Market Participants and their generating assets, organised into Balancing Mechanism Units (BMUs), in real time to ensure that system balance is maintained

NETSO receive commercial and operational data (also known as dynamic parameters) from each BMU.

This includes

- Final Physical Notifications (FPNs) – the generation or consumption profile of the BMU for each settlement period (30 minutes) of the day;
- Operational data – technical data such as ramp rates i.e. how quickly a BMU can alter its generation or consumption; and
- Bids or Offers – how much the BM participant is willing to pay or be paid by NETSO to increase or decrease their BMU's generation/or consumption by a given amount.

This data is used in balancing tools to inform balancing decisions with the objective of ensuring cost efficiency whilst accounting for system needs and security. All wholesale market participants, Generators and Suppliers (apart from Non-Physical Traders) will register BMUs. These BMUs contain either generating unit(s) or a collection of consumption Meters. After each Settlement Period all energy that is produced or consumed at Meters within a BMU is then used to calculate imbalance (difference between contracted position and metered position) for each Party's energy account.

#### What is BSAD?

NETSO are required to publish Balancing Service Adjustment Data (BSAD) under Standard [Condition C16 of the Transmission License](#) and BSAD is used as part of the electricity imbalance price calculation specified in [Section T 'Settlement and Trading Charges'](#) (paragraph 4.4) of the Balancing and Settlement Code (BSC).

BM data is used to adjust Parties' imbalance positions so that they are not disadvantaged or penalised for any NETSO instructions that require them to move away from their contracted position. Currently non-BM actions and data are not used to adjust Parties' imbalance positions, but this will change following implementation of [P354](#).

Balancing Service Adjustment Actions that impact the imbalance price may include, but are not limited to, the following balancing actions:

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- Non-BM Short Term Operating Reserve (STOR);
- Forward Contracts; and
- Maximum Generation.

Data reported against each trade as described in Section Q paragraph 6.3.2 includes:

- The volume;
- The cost;
- A System Operator (SO) flag;
- A Short Term Operating Reserve (STOR) flag; and
- A unique sequential number.

System Operator (SO) flagged actions are those associated with system management and are therefore removed from the imbalance price calculations.

The inclusion of this information ensures market participants have visibility of the balancing actions NETSO has taken outside of the BM. This data is then published through the [Trade Reporting page on NETSO's website](#) as well as being sent to BSCCo, where it is published alongside BM data on the [Balancing Mechanism Reporting Service \(BMRS\)](#).

### **What is the purpose of non-BM bilateral trades?**

Not all Parties are able or willing to participate in the BM - typically smaller generators due to prohibitive costs. Further, not all Balancing Services are dispatched through the Balancing Mechanism.

Any relevant balancing service including non-BM Short Term Operating Reserve (STOR) actions, taken outside the Balancing Mechanism, will be provided through BSAD as a Balancing Service Adjustment Action.

As discussed in other Industry changes, operating in the BM creates additional requirements on Parties over and above those which may be required for non-BM actions. These include metering, communications and data provision to the NETSO, therefore creating additional overhead costs. Commercially, Parties may not feel the extra costs of access to the BM will be offset by the additional potential revenue opportunities access brings. Gaining access to the BM has also been problematic in the past, leading to a [number of industry-wide workstreams](#) to try and open up access.

### **What is the issue?**

There is incomplete and unfair distribution of information among market participants because of the anonymised nature of the trading actions taken by NETSO outside of the BM. This anonymity creates a barrier to efficient competition.

As above, each Balancing Service Adjustment Action within the BSAD is assigned a unique sequential number as required under BSC Section Q. The purpose of this number is to separate and identify each trade made by NETSO. However, this does not identify the counterparty to the trade, leaving it anonymous and providing an information advantage

to counterparties that bilaterally trade with NETSO through Schedule 7A of the [Grid Trade Master Agreement \(GTMA\)](#) and other routes (such as interconnector trading). For example, those counterparties will know what Balancing Services are required by the NETSO, in what location and under what System conditions. This additional information unknown by other parties can give a competitive advantage.

There seem to be an increasing volume of actions taken outside the BM to manage constraints which make up a significant proportion of the system operation balancing spend, as illustrated in the graph at the bottom of this section and the supporting data in Appendix 2. Previously most of these actions would have been taken through the BM where BM Unit IDs/generators affected can be identified. However, as the proportion of non-BM actions increases an increasing volume and value of the system operation actions are becoming less transparent.

[Section C16 of the Transmission Licence](#) requires NETSO to operate the Transmission System in such a way that does not hamper competition in the market, while ensuring that the operation is done efficiently and transparently.

The current lack of transparency in actions taken by NETSO when balancing the system does not fully realise these objectives. This Modification will better enhance transparency for market participants, which in turn will ensure fair competition between all balancing service providers and other market players, ensuring that the system is operated in the most efficient manner possible. This Modification will therefore ensure NETSO's compliance with 1(b), (e), (g), and (h) of the C16 Statement.

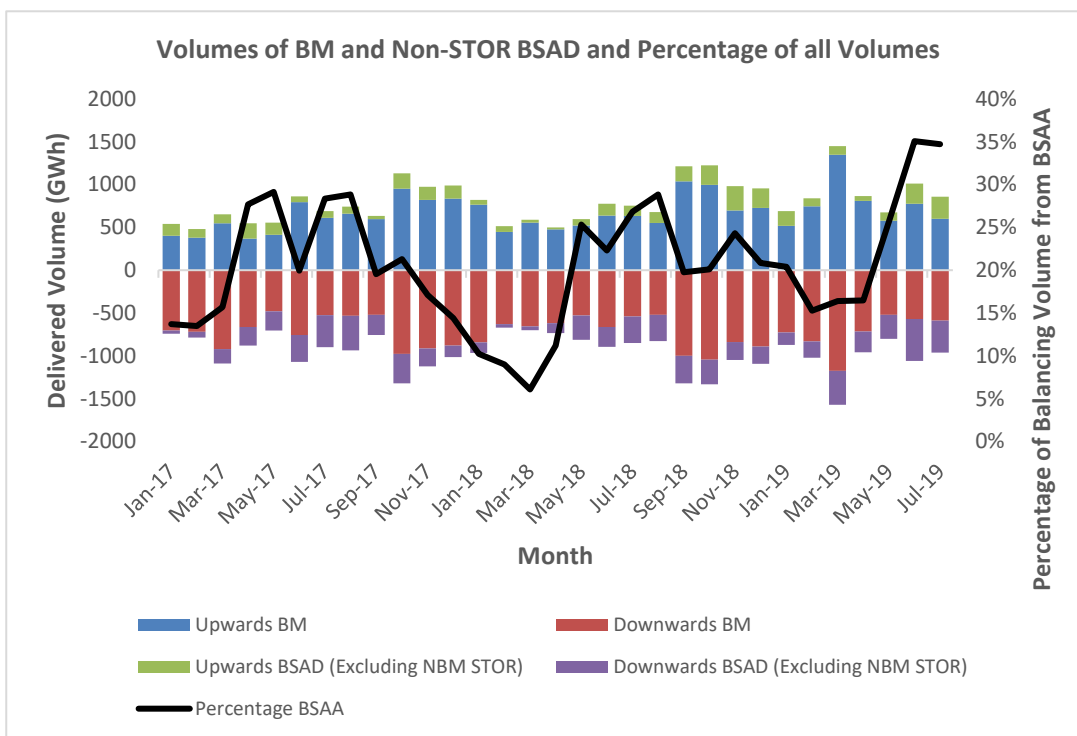
## **European Obligations**

[Article 3\(2\) of the European Balancing Guidelines \(EB GL\)](#) states that relevant National Regulatory Authorities (Ofgem fulfils this role in the UK) and System Operators should aim to foster effective competition and transparency in balancing markets. The lack of a clear identifier for counterparties in bilateral trades is in clear opposition to these high-level objectives. Moreover, this Modification ensures NETSO is compliant with its obligations under the European Network of Transmission System Operators (ENTSO-E) System Operation Guideline Article 4, in particular the requirement to ensure transparency.

## Supporting Information / Analysis

The graph below details extracted upward and downward total BM volumes, non-STOR BSAD volumes (-/+ ) and a calculation of the proportion of BSAD versus total balancing volumes to represent the total BSAD percentage. As the graph shows, the proportion of non-BM balancing actions is significant, thus a lack of transparency in the relevant data creates a potential barrier to efficient competition.

Data transparency will foster greater competition and allow for greater decision making, supporting new and innovative market strategies. Furthermore, improving transparency and equal access to data provides a level playing field for all current and future Market Participants. Where possible, the Workgroup will determine and quantify the benefits greater transparency and visibility of trades will bring to new and existing Parties. The data supporting the graph can be found in Appendix 2.





#### Proposed solution

This Modification seeks to amend Section Q 6.4.2 to require the inclusion of additional information to the existing BSAD data to enhance the clarity and transparency to market participants of bilateral trades taken by NETSO for balancing services outside of the BM. This will be achieved by including the BM Unit ID (or equivalent where the asset providing the balancing does not have an associated BM Unit) of the affected counterparty.

Implementation of this Modification may require consequential changes to bilateral contracts between NETSO and balancing service providers and to the BSAD Methodology.

#### Applicable BSC Objectives

##### Impact of the Modification on the Relevant Objectives:

Relevant Objective	Identified impact
(a) The efficient discharge by the Transmission Company of the obligations imposed upon it by the Transmission Licence	<b>Positive</b>
(b) The efficient, economic and co-ordinated operation of the National Electricity Transmission System	<b>Positive</b>
(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	<b>Positive</b>
(d) Promoting efficiency in the implementation of the balancing and settlement arrangements	<b>Positive</b>
(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]	<b>Positive</b>
(f) Implementing and administrating the arrangements for the operation of contracts for difference and arrangements that facilitate the operation of a capacity market pursuant to EMR legislation	Neutral
(g) Compliance with the Transmission Losses Principle	Neutral

The Proposer believes this Modification would better facilitate **Applicable BSC Objectives (a), (b), (c), (d) and (e)** for the reasons set out below:

#### Views against Objective (a)

The Proposed Modification will better facilitate Applicable BSC Objective (a) as the addition of identifiers for providers of Balancing Service providers will ensure that the NETSO is compliant with its obligations under Section C16 of the Transmission Licence.

#### 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 administrating the arrangements for the operation of contracts for difference and arrangements that facilitate the operation of a capacity market pursuant to EMR legislation

(g) Compliance with the Transmission Losses Principle

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### **Views against Objective (b)**

Increased transparency in reporting will give the market confidence that the most economic and efficient balancing actions are being taken by the NETSO, thus providing increased certainty and confidence over investment decisions therefore promoting effective competition and aiding siting decisions making the operation more efficient. For example if Parties can see a real need for Balancing Services in a particular part of the System they may choose to locate their future assets there to satisfy that need.

### **Views against Objective (c)**

Enhanced transparency of actions taken by NETSO will improve the trust of market participants, and ensure that there is effective competition between Parties by removing the information imbalance.

### **Views against Objective (d)**

Ensuring that transparent data is readily available to all market participants will enable disputes and errors to be efficiently resolved and/or prevented.

### **Views against Objective (e)**

The Proposed Modification will better facilitate Applicable BSC Objective (e) as it will ensure transparency in the market and foster effective competition, as per the objectives set out in Article 3 of the EBGL. Further, it ensures NETSO is better aligned with its obligations under ENTSO-E System Operation Guideline Article 4.

## **Implementation approach**

The Proposer contends that the implementation of the Modification should be achieved as quickly as possible as the defect is current and is actively hampering efficient competition, ultimately costing the end consumer.

This Modification should be implemented as part of the first available BSC Release following Authority decision, allowing for any lead time for implementation of changes to Systems identified during the Assessment Phase. As such, an implementation date of February 2021 is suggested.

## 4 Areas to Consider

In this section, we highlight areas, which we believe the Panel should consider when making its decision on how to progress this Modification Proposal, and which a Workgroup should consider as part of its assessment of P399. 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.

### Consider if there is any merit in alignment with the C16 Consultation and other work areas

The NETSO are currently consulting on proposed changes to the C16 statements. Parties have requested greater transparency regarding publication of Schedule 7 processes including counter party publication Consultation Questions. This may result in new reporting requirements, which may then open up the possibility of including the solution proposed within this Modification.

The Grid Trade Master Agreement governs how electricity trades are undertaken between Parties. Schedule 7 within this document sets out the contractual structure of Pre-Gate BM Unit Transactions (PGBTs) whilst Schedule 7A of GTMA sets out the provisions for BM Unit Specific Transactions.

### Future Scale of Non-BM Trades

Parties now have greater access to the Balancing Mechanism. The Workgroup should consider the longevity and scale of Non-BM Trades compared to any costs of implementation as well as the likely implementation date. For example, if Parties can and will be dispatched through the Balancing Mechanism as opposed to outside the Balancing Mechanism, will the defect still be a defect in say one years' time?

### Areas to consider

The table below summarises the areas we believe a Modification Workgroup should consider as part of its assessment of P399:

Areas to Consider
Are there any interactions with current or planned Industry workstreams?
Will this defect still exist at the same magnitude in future?
How will P399 impact the BSC Settlement Risks?
What changes are needed to BSC documents, systems and processes to support P399 and what are the related costs and lead times? When will any required changes to subsidiary documents be developed and consulted on?
Are there any Alternative Modifications?
Should P399 be progressed as a Self-Governance Modification?
Does P399 better facilitate the Applicable BSC Objectives than the current baseline?

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## 5 Proposed Progression



The Proposer feels that this Modification **should not be classed as Self-Governance** as it is likely to impact Self Governance criteria (a) (ii); where there is an information imbalance between parties, those with additional insights may leverage it to their advantage. Further, it should not be progressed as Urgent as, although the defect impacts efficient competition, it does not negatively affect a particular type of Party or customer more than another and should be subject to assessment by a Workgroup.

### Next steps

This Modification should be assessed by a Workgroup and **submitted into the Assessment Procedure**.

### Workgroup membership

The assessment of this Modification Proposal requires knowledge in:

- Electricity balancing and Settlement arrangements;
- Procurement of balancing services; and
- Electricity Transmission License provisions.

### Timetable

The table below displays the proposed progression of the Modification.

Proposed Progression Timetable for P399	
Event	Date
Present Initial Written Assessment to Panel	16 January 2020
Workgroup Meeting 1	W/B 27 Jan 20
Workgroup Meeting 2	W/B 24 Feb 20
Assessment Procedure Consultation (15 WDs)	09 Mar 2020 – 27 Mar 20
Workgroup Meeting 3	W/B 06 Apr 20
Present Assessment Report to Panel	14 May 2020
Report Phase Consultation (10 WDs)	18 May 20 – 29 May 20
Present Draft Modification Report to Panel	11 June 2020
Issue Final Modification Report to Authority	18 June 2020

### What is the Self-Governance Criteria?

A Modification that, if implemented:

(a) is unlikely to have a material effect on:  
(i) existing or future electricity consumers; and  
(ii) competition in the generation, distribution, or supply of electricity or any commercial activities connected with the generation, distribution, or supply of electricity; and  
(iii) the operation of the national electricity transmission system; and  
(iv) matters relating to sustainable development, safety or security of supply, or the management of market or network emergencies; and  
(v) the Code's governance procedures or modification procedures; and

(b) is unlikely to discriminate between different classes of Parties.

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## 6 Likely Impacts

This Modification will impact:

- All BSC Parties;
- Generators;
- Virtual Lead Parties;
- NETSO; and
- BSCCo.

The Modification will also impact BSC Central Systems, specifically the Settlement Administration Agent (SAA) and the BMRS systems. As a minimum, we anticipate that changes will be required to BSC Section Q 'Balancing Mechanism Activities' and to the BSAD.

### Impact on BSC Parties and Party Agents

Party/Party Agent	Potential Impact
All BSC Parties	The greater transparency provided by this additional information will enable all BSC Parties to have a clearer view of NETSO's balancing actions and its beneficiaries. Counterparties (such as Generators and Virtual Lead Parties) may need to amend their contracts with NETSO.

### Impact on Transmission Company

As part of the solution NETSO will be required to create a new field in BSAD and will have to make the appropriate system and process changes. As above, NETSO may need to amend its contracts with counterparties in the relevant bilateral trades.

### Impact on BSCCo

Area of ELEXON	Potential Impact
Market Analysis	Greater insights may be gained with this data

### Impact on BSC Settlement Risks

Due to the additional information required, there is a slight impact on Risk 028 'NETSO does not submit or submits incorrect Settlement data' as there is a slightly greater chance that NETSO submits incorrect data. This will be mitigated by system testing.

### Impact on BSC Systems and processes

BSC System/Process	Potential Impact
BMRA	Changes would be required to accept and process the modified BSAD file
SAA	

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Impact on Code	
Code Section	Potential Impact
Section Q – Balancing Services Activities	Changes would be required to implement this Modification

Impact on Code Subsidiary Documents	
CSD	Potential Impact
SVAA User Requirement Specification	Changes may be required to reflect changes to data
BMRA Service Description	
SVAA Service Description	
SAA User Requirement Specification	
BMRA User Requirement Specification	
SAA Service Description	

Impact on Core Industry Documents and other documents	
Document	Potential Impact
BSAD Methodology	Text may be required to highlight that counterparties are required to be identified

**Impact on a Significant Code Review (SCR) or other significant industry change projects**  
 An SCR exemption request was sent to Ofgem on 07 January 2020. As of 09 January 2020, we are awaiting confirmation.

**Impact on Consumers**  
 More efficient competition is expected to positively impact consumer bills.

**Impact on the Environment**  
 None identified.

## 7 Recommendations

We invite the Panel to:

- **AGREE** that P399 progresses to the Assessment Procedure;
- **AGREE** the proposed Assessment Procedure timetable;
- **AGREE** the proposed membership for the P399 Workgroup; and
- **AGREE** the Workgroup's Terms of Reference.

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# 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
BMRS	Balancing Mechanism Reporting Service
BMU	Balancing Mechanism Unit
BSAD	Balancing Service Adjustment Data
BSC	Balancing and Settlement Code
BSCCo	Balancing and Settlement Company
CSD	Code Subsidiary Document
EBGL	European Balancing Guideline
ENTSO-E	European Network of Transmission System Operators
GTMA	Grid Trade Master Agreement
IWA	Initial Written Assessment
NETSO	National Electricity Transmission System Operator
SAA	Settlement Administration Agent
SCR	Significant Code Review
STOR	Short Term Operating Reserve
SVAA	Supplier Volume Allocation Agent

## 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
3	BSC Section Q	<a href="https://www.elexon.co.uk/the-bsc/bsc-section-q-balancing-services-activities/">https://www.elexon.co.uk/the-bsc/bsc-section-q-balancing-services-activities/</a>
4	Transmission License	<a href="https://epr.ofgem.gov.uk//Content/Documents/Electricity%20transmission%20full%20set%20of%20consolidated%20standard%20licence%20conditions%20-%20Current%20Version.pdf?utm_source=ofgem&amp;utm_medium=&amp;utm_term=&amp;utm_content=licencecondition&amp;utm_campaign=epr">https://epr.ofgem.gov.uk//Content/Documents/Electricity%20transmission%20full%20set%20of%20consolidated%20standard%20licence%20conditions%20-%20Current%20Version.pdf?utm_source=ofgem&amp;utm_medium=&amp;utm_term=&amp;utm_content=licencecondition&amp;utm_campaign=epr</a>

External Links		
Page(s)	Description	URL
4	BSC Section T	<a href="https://www.elexon.co.uk/the-bsc/bsc-section-t-settlement-and-trading-charges/">https://www.elexon.co.uk/the-bsc/bsc-section-t-settlement-and-trading-charges/</a>
5	Wider Access to the Balancing Mechanism Roadmap	<a href="https://www.nationalgrid.com/sites/default/files/documents/Wider%20BM%20Access%20Roadmap_FINAL.pdf">https://www.nationalgrid.com/sites/default/files/documents/Wider%20BM%20Access%20Roadmap_FINAL.pdf</a>
5	P354	<a href="https://www.elexon.co.uk/mod-proposal/p354/">https://www.elexon.co.uk/mod-proposal/p354/</a>
5	NETSO Trade Reporting page	<a href="https://extranet.nationalgrid.com/BSAD/">https://extranet.nationalgrid.com/BSAD/</a>
5	Balancing Mechanism Reporting Service	<a href="https://www.bmreports.com/bmrs/?q=help/about-us">https://www.bmreports.com/bmrs/?q=help/about-us</a>
5	Grid Trade Master Agreement	<a href="https://www.nationalgrideso.com/document/92431/download">https://www.nationalgrideso.com/document/92431/download</a>

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## Appendix 1

This Appendix contains the supporting data for the graph highlighting the proportion of Balancing Services accounted for by non-BM actions on Page 6.

Month	Total Accepted Bid Volume	Total Accepted Offer Volume	Total Accepted Undo Bid Volume	Total Accepted Undo Offer Volume	Upwards BM	Downwards BM	Upwards BSAD (Excluding NBM STOR)	Downwards BSAD (Excluding NBM STOR)	Total	Percentage BSAA
Jan-17	-700923.73	396483.52	7250.75	-1263.17	403734.27	-702186.91	136488.087	-39373.533	1281782.80	14%
Feb-17	-715141.68	371683.47	6471.19	-1963.28	378154.66	-717104.96	102051.886	-68495.396	1265806.89	13%
Mar-17	-917373.34	538698.74	7960.19	-2442.02	546658.93	-919815.37	104366.497	-168656.759	1739497.55	16%
Apr-17	-660900.58	361209.99	6499.03	-2371.40	367709.03	-663271.99	179125.317	-215740.5	1425846.83	28%
May-17	-476763.83	407756.52	5218.61	-3154.93	412975.14	-479918.76	143185.768	-223710.381	1259790.04	29%
Jun-17	-748818.67	786503.01	6224.80	-6434.60	792727.81	-755253.27	68924.646	-316583.641	1933489.37	20%
Jul-17	-520892.48	607761.01	4937.03	-4435.23	612698.04	-525327.71	76567.427	-373511.2	1588104.38	28%
Aug-17	-528596.05	655826.95	3761.91	-4808.86	659588.86	-533404.91	82970.14	-400712.032	1676675.94	29%
Sep-17	-517238.00	591021.19	5368.89	-4186.69	596390.09	-521424.69	35570.758	-235634.387	1389019.92	20%
Oct-17	-970627.47	944334.94	7381.54	-5300.79	951716.49	-975928.26	176975.922	-344218.339	2448839.09	21%

Nov-17	-911914.86	813410.68	8262.22	-2735.76	821672.89	-914650.61	151284.752	-207470.659	2095078.92	17%
Dec-17	-876495.94	828650.93	5630.95	-3559.02	834281.88	-880054.96	152869.104	-135766.851	2002972.79	14%
Jan-18	-836687.55	756451.57	7049.88	-4401.37	763501.44	-841088.92	58460.296	-124323.549	1787374.21	10%
Feb-18	-625172.51	438328.48	8568.89	-3705.58	446897.37	-628878.09	65667.888	-40843.832	1182287.18	9%
Mar-18	-652587.80	544805.66	9490.95	-2384.27	554296.61	-654972.07	32966.94	-45353.9	1287589.53	6%
Apr-18	-614767.19	469813.50	7824.20	-3956.73	477637.70	-618723.91	22190	-116182	1234733.61	11%
May-18	-527017.98	517678.08	5266.96	-3061.71	522945.03	-530079.69	74075.009	-282911.484	1410011.22	25%
Jun-18	-656936.35	632178.06	4340.28	-4175.12	636518.34	-661111.48	139613.047	-233002.174	1670245.04	22%
Jul-18	-535732.95	627766.32	6334.74	-3401.99	634101.06	-539134.94	119232.458	-310796.047	1603264.51	27%
Aug-18	-517685.56	545126.94	5252.16	-3318.33	550379.10	-521003.88	126562.92	-307822.598	1505768.50	29%
Sep-18	-992980.89	1030260.57	6050.12	-5445.61	1036310.69	-998426.50	178009.089	-322581.911	2535328.19	20%
Oct-18	-	988477.96	8590.10	-4683.19	997068.06	-1045621.75	225496.367	-287855.879	2556042.06	20%
Nov-18	-836781.29	688429.81	7536.50	-2347.73	695966.32	-839129.02	285243.609	-208284.515	2028623.48	21%

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Dec-18	-889297.55	719642.84	7824.35	-1803.97	727467.19	-891101.52	225528.113	-200376.775	2044473.60	21%	
Jan-19	-723995.32	505779.31	10230.65	-2451.63	516009.96	-726446.96	171794.353	-146542.561	1560793.83	20%	
Feb-19	-825189.73	738831.77	8533.93	-4316.29	747365.70	-829506.01	91682.483	-192497.835	1861052.03	15%	
Mar-19	-	1167758.83	1340107.22	8574.48	-7120.29	1348681.70	-1174879.12	100570.5	-394823.7	3018955.02	16%
Apr-19	-710206.25	801861.46	6715.43	-5140.02	808576.89	-715346.27	56382.912	-243730.339	1824036.42	16%	
May-19	-520395.78	570714.12	5080.16	-2389.08	575794.28	-522784.85	100286	-279075.1	1477940.23	26%	
Jun-19	-566187.16	769100.26	5618.46	-4327.71	774718.73	-570514.87	236887.893	-489483.5	2071604.99	35%	
Jul-19	-586773.35	594412.49	4623.99	-2580.14	599036.48	-589353.49	258099.158	-373837.497	1820326.62	35%	