PUBLIC

P354 'Use of ABSVD for non-BM Balancing Services at the MPAN Level'

P388 Red Text AMENDED Business Requirements

12 April 2019

ELEXON

Document history

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Approvals

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1. INTRODUCTION

1.1 Purpose of document

This document contains the amended Business Requirements (BR) for Balancing and Settlement Code (BSC) Modification P354[1].

Note that this document uses the approved P354 BRs as a baseline, as 67-A seeks to amend the P354 solution to align to the P344 solution. Therefore only the amendments specified (highlighted in red) form the basis for the 67-A BRs on which ELEXON will:

i) procure the high-level Impact Assessments, with approximate costs and timescales, from its Service Providers;

ii) identify the impact on its processes;

iii) initiate the industry Consultation;

iv) capture any changes to the BRs; and

v) develop more detailed Solution Requirements, which will be used to procure a Detailed Level Impact Assessment from its Service Providers. This will have firm costs and timescales, and will be the basis for the design of the 67-A solution.

1.2 Background

P344 'Project TERRE'

As part of the Wider Access piece P344 introduced a new BSC Participation Role called Virtual Lead Party (VLP) who will act as Independent Aggregators in the SVA market. An Independent Aggregator is a party who bundle changes in consumer's loads and / or distributed generation output for sale as a Balancing Service but do not simultaneously supply the customer with energy.

Balancing Services delivered by a VLP will affect metered volumes at site boundaries and therefore the Imbalance Position of the registered Supplier at those sites. To ensure that each Supplier has a correct imbalance position for each Settlement Period – i.e. one that is not distorted by VLP actions - P344 introduces obligations on VLPs to inform the Supplier Volume Allocation Agent (SVAA) of the MSID Pairs within their portfolio that they will be using to provide Balancing Services. P344 also introduces obligations on VLPs to inform the SVAA of the volume deviation of each MSID Pair they have used to provide Balancing Services in the form of MSID Pair Delivered Volume.

MSID Pair Delivered Volume are used to calculate the adjustments to be made to Supplier Imbalance Positions to rectify the impact of the actions taken by VLPs.

P354 'ABSVD'

The P354 solution rectifies a defect in the current arrangements for notifying Applicable Balancing Services Volume Data (ABSVD) to BSC systems to allow the correction of imbalance positions distorted by the provision of Balancing Services to the NGESO which cannot be allocated to BM Units. P354 obligates the Transmission Company to notify MSID Pairs and provide MSID Pair Delivered Volumes for non-BM Balancing Services to the SVAA for allocation to the appropriate Supplier BM Units to correct Suppliers' Energy Imbalance positions.

Balancing Services actions delivered by a Non-BM Balancing Service Provider will affect the metered volumes of those MSIDs used to provide the services and therefore the Imbalance Positions of the registered Suppliers for those MSIDs.

For more detailed information about P344 or P354, please refer to the P344 and P354 Final Modification Reports.

[1] 'Aligning the P344 / P354 Solutions'.

What is the issue?

Both P344 and P354 solutions will to adjust Suppliers' Imbalance Positions for actions taken by a third Party i.e. VLP actions in P344 and Non BM Party actions in P354. Both solutions mandate the creation of a register to record the details of the MSIDs used by these third Parties including the relevant HHDA and Supplier. MSID Pair Delivered Volumes are collected and compared against metered volumes to be used in calculating an adjustment for the impacted Supplier.

Therefore P344 and P354 were designed in parallel to synergise and share processes in regards to recording MSID Pairs allocations on the SVA Metering System Balancing Services Register and the subsequent Delivered Volume aggregation which is used as the basis for a volume adjustment to the relevant Supplier Primary BM Unit.

However as neither BSC Modification had been approved while drafting the processes could not be aligned in the design phase as they could not reference nor interact with each other. This has resulted in two independent solutions which when combined create duplicate, incoherent and contradictory set of defined terms and obligations. If the solutions are not aligned, the legal integrity of the BSC will deteriorate and there will be a risk that Suppliers' imbalance positions will not be adjusted appropriately.

What is the solution?

SVA Metering System Balancing Services Register

Both solutions were written to capture MSID Pairs from a singular data source and have minor format discrepancies in regards to required data items. A combined solution is needed to accept MSID Pairs from multiple sources and be able to store and differentiate between MSID Pairs.

Delivered Volume aggregation

This modification proposed to align the solutions by applying GSP Group Correction Factor to the P354 ABSVD volumes to ensure that all volumes in Settlement have been adjusted consistently.

1.3 Scope of the solution

Under the solution the following areas are within scope:

- Aligning and simplifying the parallel (P344 & P354) processes surrounding allocation of MSID Pairs recorded on the SVA Metering System Balancing Services Register.
- Aligning the Delivered Volume aggregation processes for P344 and P354

Below is a summary table of the amendments made to the P354 solution.

	Changes to BR Summary
BR1.1	Added to the MSID Pair data requirements that NETSO has to align with P344 MSID Pair requirements
BR1.2	Reworded for clarity
BR2.1	Added requirement to validate and notify NETSO of results. Added specific reference that if successful that the MSID Pair to be recorded in the SVA Metering System Balancing Services Register
BR2.2	Added requirement to validate and notify NETSO of results. Added specific reference that if successful that the MSID Pair to be recorded in the SVA Metering System Balancing Services Register
BR3.2	Amended Standing Data requirements to match P344
BR3.3	Added to scenarios when MSID Standing Data is to be re-procured
BR4.1	Reference added that D0354 data flow has been designed specifically for this purpose
BR4.2	Reference added that D0355 and D0356 data flow have been designed specifically for this purpose
BR4.3	Added to required data items and reference added that D0385 data flow has been designed specifically for this purpose
BR4.4	Removed requirement to report missing data to ELEXON (as agreed in P344 ELEXON will have access to the data and doesn't need to be notified) Added requirement to use previous settlement run values if none received for current Settlement run in line with P344.
BR4.5	Changed to reference SVA Metering System Balancing Services Register rather than MSID Standing Data
BR 6.1-3	Reworded for clarity
BR6.4	Removed requirement to report missing data to ELEXON (as agreed in P344 ELEXON will have access to the data and doesn't need to be notified) Added requirement to use previous settlement run values if none received for current Settlement run in line with P344.
BR6.10	Added requirement to adjust the LLF adjusted delivered volume by GSPGCF

2. BUSINESS REQUIREMENTS

The following parties, documentation, processes and systems will be impacted by the 67-A requirements:

- NETSO;
- Half Hourly Data Aggregators (HHDAs);
- SVAA;
- Balancing Mechanism Reporting Service (BMRS);

BR1 – The Transmission Company shall provide SVAA with a list of MSID Pairs containing Eligible Metering Systems before the P354 implementation date and update it as appropriate after the P354 implementation date	
NETSO shall be required to notify the SVAA prior to the P354 Implementation Date of which SVA MSID Pairs should be treated as providing ABSVD services for purposes of settlement. A new process for the NETSO to provide the SVAA with a list of MSID Pairs prior to the P354 Implementation Date. An Eligible Metering System is any Import or Export Metering System that may be included in a MSID Pair.	
1.1	The NETSO shall send to the SVAA the full list of MSID Pairs that may be used to provide ABSVD at least 10 business days prior to the P354 Implementation Date. The information shall include: • GSP Group Id • MSID of the Import Metering System • MSID of the associated Export Metering System (where applicable) • the date from which the TC may provide MSID Pair Delivered Volumes in relation to this MSID Pair (the "MSID Pair Effective From Date") • the last date for which the TC may provide MSID Pair Delivered Volumes in relation to this MSID Pair (the "MSID Pair Effective To Date")[2] • Import Customer Consent Flag* • Import Customer Consent Flag Effective From Date • Import Customer Consent Flag Effective To Date • Export Customer Consent Flag* • Export Customer Consent Flag Effective From Date • Export Customer Consent Flag Effective To Date * 'True' indicates that the NETSO has been notified by the Non BM Balancing Services Provider[3] that they have obtained consent from the Customer that the SVAA may provide MSID ABSVD and MSID ABSVD (losses) to each relevant Supplier.
1.2	Post the P354 Implementation date NETSO shall send to SVAA any new or amended MSID Pairs within 5 business days of becoming aware of them and at least 5 business days before the "MSID Pair Effective From Date".

[2] The Effective To Date is mandatory.
[3] The Non BM Balancing Services Provider must ascertain whether the Customer consents and provide this information to the NETSO.

BR2 – SVAA to receive, load and store MSID Pairs received from NETSO	
The SVAA System must receive, load and store the MSID Pairs received from the NETSO.	
2.1	Before the P354 Implementation Date, the SVAA must be able to: • receive the full list of MSID Pairs set out in BR1.1; and • load the MSID Pairs via a bulk upload • validate MSID Pair data submissions from NETSO using the business logic as detailed in Appendix D • store the validated MSID Pairs within the SVA Metering System Balancing Services Register within 1 full business days of receipt. • send NETSO confirmation or rejection notice based upon results of validation • identify whether the MSID Pairs as relating to ABSVD services or Secondary BM Units (P344) for the purposes of settlement
2.2	After the P354 Implementation Date, the SVAA must be able to: • receive new and updated MSID Pairs, as specified in Requirement 1.2; and • load the new and updated MSID Pairs • validate all MSID Pair data submissions from NETSO using the business logic as detailed in Appendix D • store the validated MSID Pairs within the SVA Metering System Balancing Services Register within 1 full business days of receipt. • send NETSO confirmation or rejection notice based upon results of validation • identify whether the MSID Pairs as relating to ABSVD services or Secondary BM Units (P344) for the purposes of settlement
2.3	The SVAA operator must be able to create, view and edit data relating to MSID Pairs.

The Workgroup considered whether the NETSO, the BSC Central Systems or customers could allocate the delivered volume to the Import and Export MSIDs. The NETSO has access to Operational Metered data, but does not have access to the Settlement Data, so cannot specify delivered volumes for individual Import and Export MSIDs, only the delivered volumes for the MSID Pair at each Boundary Point. Customers (usually aggregators) are not BSC Parties and so cannot be mandated to provide such information to the BSC Central Systems.

Therefore, the Workgroup agreed that the SVAA should receive the delivered net volume for each MSID Pair from the NETSO and use HH Metered Data for the relevant MSIDs to calculate MSID ABSVD. HHDAs would be required to supply the Metered Data and Line Loss Factor Class (LLFC) for each MSID.

BR3 – SVAA to obtain and store details of Supplier, HHDA and GSP Group for each Eligible Metering System notified by the Transmission Company in MSID Pairs	
A new process will be required for SVAA to obtain and store details of the Supplier, HHDA and GSP Group for each Eligible Metering System notified via MSID Pairs in the **"SVA Metering System Balancing Services Register"**	
3.1	When NETSO first notifies the SVAA of the list of MSID Pairs for P354 implementation, SVAA must consult ECOES, to obtain details of the Supplier, HHDA and GSP Group for each Eligible Metering System included in those MSID Pairs and load these in time for use from the P354 Implementation Date.

3.2	The SVAA system must be able to store the standing data for each Eligible Metering System. The details to be stored include: • MSID number • GSP Group Id • Supplier Id • Supplier_MSID Effective From Date • Supplier_MSID Effective to Date • HHDA Id • HHDA_Supplier Effective From Date • HHDA_Supplier Effective To Date
3.3	SVAA must refresh the MSID Standing Data (using data obtained from ECOES, within 1 business days of being notified of additional or amended MSID Pairs received from NETSO. In addition SVAA shall refresh the MSID Pair Standing Data when it becomes aware that the MSID Standing Data is (or may be) incorrect or incomplete. Specific events that would trigger this obligation include: • Receive notification of HHDA Metering System Reporting Rejection • SVAA identify missing MSID Metered Volumes expected from the HHDA • Mismatches between MSID Standing Data and the disaggregated metered data received from HHDAs

BR4 – SVAA to request and HHDAs to provide Metered Data for MSIDs	
A new process will be required for HHDAs to provide SVAA with HH disaggregated metered data, the LLFC, the CCC and the relevant BM Unit for each Eligible Metering System.	
4.1	Each time the MSID Standing Data is updated to include new Eligible Metering System(s) in new MSID Pair(s), or amend the MSID Standing Data for an existing Eligible Metering System, SVAA should immediately send an automated request to the HHDA for disaggregated metered data relating to that MSID for each Settlement Period. The request will be sent via a Data Transfer Catalogue (DTC) dataflow, and will contain at least the following data items: • The MSID (known in the DTC as the MPAN Core, data item J003); • The MSID Pair Effective From Date from which data is required; and • The MSID Pair Effective To Date. (The D0354 data flow has been designed specifically for this purpose)

4.2	HHDAs must be able to accept or reject the request from SVAA in BR4.1 via a DTC dataflow. *For the avoidance of doubt, a HHDA could only reject the request if they had been erroneously identified as responsible for a MSID, and so were unable to provide the data for that MSID.* (The D0355 and D0356 data flows have been designed specifically for this purpose)
4.3	As part of each Volume Allocation Run, HHDAs should send SVAA a report of disaggregated metered data for any MSIDs for which (on the Settlement Day in question[4]) the HHDA is registered in SMRS, and the SVAA has requested data. This data will be sent using a DTC data flow, which will contain the following data items (for each such MSID and each Settlement Period) starting on the Effective From Settlement Date from which data is required specified in BR4.1: • The 13-digit MSID (analogous to MPAN Core under the Master Registration Agreement) • The HH metered data (Allocated Metering System Metered Consumption ($AVMMC_{HZaNLKji}$)); • The Line Loss Factor Class (LLFC) applicable to that MSID and Settlement Date; • The Supplier Id to which the MSID is registered on that Settlement Date; • The Primary BM Unit Id to which the MSID is registered on that Settlement Date; • GSP Group Id • Consumption Component Class Id • Line Loss Factor Class Id • Settlement Date • Settlement Run • Settlement Period *For the avoidance of doubt, HHDAs should continue to send the HH metered data relating to all MSIDs included in this process to SVAA as part of the relevant D0040 or D0298 data flow. In other words, for the Metering Systems to which this Modification applies the HHDA must provide both aggregated data (in the D0040 or D0298) and disaggregated data (in the new data flow).* (The D0385 data flow has been designed specifically for this purpose)
4.4	Where the SVAA does not receive a file of disaggregated metered data from an HHDA for a Volume Allocation Run for a requested MSID for a Settlement Day for which the MSID is effective, SVAA shall: • Contact the HHDA to request the missing data within [1] working day. • If all attempts to acquire the missing data are unsuccessful then the SVAA will, where possible, derive data from the previous Settlement Run for that Settlement Day. If no previous Settlement Run exists then no data is entered into that Settlement Run SVAA must not use default data to replace missing data for the initial calculation of ABSVD; the process to calculate MSID ABSVD for an Eligible MSID should only be run where disaggregated metered data has been received from the HHDA for that MSID and MSID Pair Delivered Volume data has been received for the MSID Pair which includes that MSID from the TC for that Settlement Period.

[4] Provided that the MSID Pair relating to the Eligible MSID is effective for that Settlement Date.

4.5	SVAA must be able to load, validate and store the disaggregated metered data received from HHDAs. Validation checks shall include the following: • SVAA shall validate that the MSIDs included in the file are in a valid MSID Pair (according to the SVA Metering System Balancing Services Register). Where no disaggregated Meter data has been received in respect of an MSID when expected, this may indicate that a Change of Supplier (CoS) and/or Change of HHDA has occurred, and SVAA must refresh the MSID Standing Data (see BR3.3); and • SVAA shall seek to validate that the Supplier Id reported by the Supplier for each MSID (in ECOES, or other source approved by the Panel) matches that in the MSID Standing Data. If they do not match this may indicate that a CoS has occurred, and SVAA must obtain the new Supplier and HHDA for the MSID from ECOES, or other source approved by the Panel, and refresh the MSID Standing Data.
4.6	HHDAs must not disclose to the Supplier which MSIDs they have been requested to provide disaggregated metered data for, except where the Customer has given their consent (but may disclose the number of such MSIDs).

The Workgroup agreed a flexible solution where the TC will send the MSID Pair Delivered Volumes for each Settlement Period to SVAA at the earliest opportunity and no later than 45 calendar days after the Balancing Service was provided – i.e. in time for the First Reconciliation Volume Allocation Run.

The TC may resubmit MSID Pair Delivered Volumes for a Settlement Period up to the Final Reconciliation Run (RF).

The P354 Proposer suggested that ABSVD values should relate to the volume of Balancing Services that was successfully delivered (rather than the instructed volumes). The Workgroup noted that this question is one for an amended ABSVD Methodology (which will specify how the TC calculates ABSVD values), rather than the BSC.

BR5 – The TC shall send MSID Pair Delivered Volumes to the SVAA	
TC shall send the MSID Pair Delivered Volumes to the SVAA for each Settlement Period at the earliest opportunity, and by no later than the 45th day after the Balancing Service was provided. *Where possible, the* NETSO *shall develop bilateral contracts with Non BM Balancing Service Providers that will enable the* NETSO *to deliver data MSID Pair Delivered Volumes to the SVAA by no later than the 15th day after the Balancing Service was provided to facilitate the correction of imbalance positions in the Initial Volume allocation Run.*	
5.1	A new flow will be required in order for the NETSO to send MSID Pair Delivered Volumes to SVAA. The data must include: • Settlement Day • Settlement Period • MSID Pair ID • Import MSID (mandatory) • Export MSID (optional) • MSID Pair Delivered Volume (MWh).

	MSID Pair Delivered Volumes represent an aggregate net volume of Active Energy for the whole Settlement Period for each MSID Pair and follow the sign conventions set out in paragraph 2.4 of Annex X-2.
5.2	The TC may send, or resend, MSID Pair Delivered Volumes to SVAA at any time until the Final Reconciliation Volume Allocation Run.

The Workgroup agreed that the SVAA will allocate non-BM ABSVD to the Import MSID and/or Export MSID in each MSID Pair as appropriate and, ultimately, aggregate it to Supplier BM Unit level for each Supplier BM Unit. The reason that the allocation must be done by SVAA (rather than the NETSO as originally proposed) is that it requires access to Settlement metered data, which the NETSO does not have. Appendix B contains examples of this process.

Having allocated the MSID Pair Delivered Volumes to MSIDs to create MSID ABSVD and having applied the appropriate LLF to this to create the MSID ABSVD (losses) and the LLF adjusted MSID ABSVD, SVAA shall send MSID ABSVD and MSID ABSVD (losses) to Suppliers for each Eligible MSID for which the relevant non-BM Balancing Service provider has given their consent for that Settlement Date, this shall be subject to the consent of the Customer (For the Alternate, no Customer consent is required).

SVAA then apply the GSP GCF to the LLF adjusted ABSVD volumes and subsequently aggregate the LLF and GSP Group Correction Factor adjusted MSID ABSVD to Supplier BM Unit level for each Supplier BM Unit (creating "Supplier BM Unit Non BM ABSVD") before sending it to the SAA.

BR6 – The SVAA must allocate the MSID Pair Delivered Volumes to the Eligible Metering Systems in the relevant MSID Pair	
A new process will be required for SVAA (using the data from BR4 and BR5 above) to allocate MSID Pair Delivered Volumes to the Eligible Metering Systems in the relevant MSID Pair to create MSID ABSVD.	
6.1	The SVAA must validate that the MSID Pair specified in a MSID Pair Delivered Volume by checking using the business logic as detailed in Appendix E *E.g. the SVAA must validate each Eligible Metering System in a MSID Pair Delivered Volume against the Eligible Metering Systems in the SVA Metering System Balancing Services Register. Where a corresponding Eligible Metering System is not found, the SVAA system should raise a warning message to the SVAA Operator stating that the MSID is not an Eligible Metering System.*
6.2	The SVAA shall send the NETSO a confirmation or rejection notice based upon results of validation for each MSID Pair Delivered Volume received.
6.3	The SVAA must be able to load and store the validated MSID Pair Delivered Volumes received from the NETSO, and any subsequent validated updates, for a Settlement Period.
6.4	SVAA must use the disaggregated metered data (prior to adjustment for line losses and GSP Group Correction Factor) provided by HHDAs to allocate the MSID Pair Delivered Volume to the component MSIDs in that MSID Pair for each Settlement Period, creating 'ABSVD' Metering System Delivered Volume ($QVMD_{Kj}$) The steps of this process are as follows: 1. For each MSID Pair, start by allocating the MSID Pair Delivered Volume to the Export MSID for a positive value (or to the Import MSID for a negative value), subject to the constraint

	that the magnitude of the MSID Pair Delivered Volume that can be allocated is capped by the magnitude of the half hourly metered data. For example, if the MSID Pair Delivered Volume is -1.3 MWh, and the Import MSID has a HH metered consumption of 800 kWh, the volume allocated to the Import MSID will be -0.8 MWh. 2. Allocate any remaining MSID Pair Delivered Volume to the other MSID in the MSID Pair (i.e. the Import MSID for a positive value, or the Export MSID for a negative value). In the example above, the remaining -0.5 MWh of MSID Pair Delivered Volume would be allocated to the Export MSID (recognising that the MSID Pair Delivered Volume must have reduced the site Export). 3. As a result the MSID ABSVD will be -0.8MWh for the Import MSID and -0.5MWh for the Export MSID. In the special case of an MSID Pair that does not include an Export MSID this process, all of the MSID Pair Delivered Volume will be allocated to the Import MSID, where the value of the HH Metered Volume for that MSID is less than or equal to the MSID Pair Delivered Volume otherwise the volume allocated to the Import MSID will be capped at the HH Metered Volume. If a MSID Pair Delivered Volume cannot be allocated in full to the component MSIDs using this process, the SVAA system will report an exception. The SVAA operator will then report this exception to ELEXON and NETSO, as an exception indicates that the MSID Delivered Volume is inconsistent with the Settlement metered data, suggesting that the MSID Delivered Volume has been reported incorrectly). If the NETSO review identifies that the exception was caused by the MSID Delivered Volume being incorrect, NETSO will submit a corrected MSID Delivered Volume to the SVAA.
6.6	SVAA must calculate Line Losses for MSID ABSVD based on the LLFC supplied by the HHDA and store the resultant **"MSID ABSVD (Losses)"**.
6.7	SVAA must calculate **"LLF adjusted MSID ABSVD"** by summing the MSID ABSVD and MSID ABSVD (losses).
6.8	SVAA must provide MSID ABSVD and MSID ABSVD (Losses) to the Supplier responsible for an Eligible Metering System This would be a new Supplier Report from each SSR Run which will require a new DTC dataflow only where the Customer has given their consent for that Settlement Date.
6.9	SVAA shall adjust the **"LLF adjusted MSID ABSVD"** for GSP Group Correction using the GSP Group Correction Factor calculated by the SVAA for each Half Hourly SVA Metering System Number (and the CCC allocated to the metered data for that SVA Metering System Number by the HHDA).
6.10	SVAA must aggregate LLF and GSPGCF adjusted MSID ABSVD to BM Unit level for each Supplier BM Unit, creating **"Supplier BM Unit Non BM ABSVD"** for each Supplier BM Unit.
6.11	SVAA must send Supplier BM Unit Non BM ABSVD for each Supplier BM Unit to SAA.

The SAA must include Supplier BM Unit Non BM ABSVD in the Settlement calculation.

BR7 – SAA stores and processes Supplier BM Unit ABSVD for each Supplier BM Unit	
The SAA shall store the Supplier BM Unit Non BM ABSVD.	
7.1	SAA shall store Supplier BM Unit Non BM ABSVD for each Supplier BM Unit received from SVAA.
7.2	SAA shall include Supplier BM Unit Non BM ABSVD in the calculation of Period BM Unit Balancing Services Volume (QBS_{ij}).
7.3	SAA must include Supplier BM Unit Non BM ABSVD in the Settlement reports (sub-flows 1 & 2 only).

BR 8 has been removed as it only relates to the alternative solution which was not approved by the Authority

The Trading Disputes process will be amended to include ABSVD.

BR9 – Amend the Trading Disputes Process to include ABSVD	
BSCP11 Trading Disputes should include ABSVD	
9.1	BSCP11 Trading Disputes shall be amended to add a section to allow BSC Parties to raise Trading Disputes relating to ABSVD.

BR10 – Publication of Volume Data By Anonymised Supplier	
ELEXON to collate and publish Volume Data at SF and R1 each month	
10.1	ELEXON should collate Volume Data at SF and R1 by Supplier each month (all data anonymised): • LLF corrected MSID ABSVD for each SP for each supplier at SF • LLF corrected MSID ABSVD for each SP for each supplier at R1 • Volume adjustment by supplier between SF and R1 • % change between SF and R1 by supplier • Similar data at an Supplier BM Unit Non BM level
10.2	ELEXON should publish anonymised Volume Data each month: • In the ELEXON Settlement Report to the Panel; or • On the ELEXON Portal; or • Another medium?

3. APPENDIX A - GLOSSARY OF TERMS

Term	Description
BM Unit Applicable Balancing Services Volume Data (ABSVD)	BSC Section Q: in relation to each Settlement Period in a Settlement Day and each BM Unit, the Transmission Company shall send the Applicable Balancing Services Volume Data to: (a) the SAA; and (b) the BMRA no later than the second Business Day after such Settlement Day. The ABSVD is used in the calculation of Period BM Unit Balancing Services Volume, which is the volume of all energy associated with Balancing Services used in the determination of imbalance. It consists of the volume of Bid Offer Acceptances plus the ABSVD. ABSVD is not provided for all Balancing Services, because not all of them are covered in the ABSVD methodology, and the BSC currently allows Parties to opt out.
ABSVD methodology	National Grid Electricity Transmission plc (NGET) is required to establish the Applicable Balancing Services Volume Data Methodology in accordance with Standard Condition C16 of the Transmission Licence.
Balancing & Settlement Code (BSC)	An industry code that various types of company involved in the generation, distribution or consumption of electricity must be a signatory to and abide as required by their Licence, which specifically concerns the Balancing and Settlement activity in Great Britain.
Balancing Mechanism (BM)	One of the tools National Grid uses to balance electricity supply and demand close to real time. Where National Grid predicts that there will be a discrepancy between the amount of electricity produced and that which will be in demand during a certain time period, they may accept a 'bid' or 'offer' to either increase or decrease generation (or consumption). The balancing mechanism is used to balance supply and demand in each half hour trading period of every day.
Balancing Mechanism Reporting Agent (BMRA)	BSC Section X-1: means the BSC Agent for Balancing Mechanism Reporting in accordance with Section E.
Balancing Mechanism Reporting Service (BMRS)	BSC Section X-1: means the service provided by the BMRA for Balancing Mechanism Reporting as described in Section V.
Balancing Mechanism Unit (BM Unit)	BSC Section X-1: means a unit established and registered (or to be established and registered) by a Party in accordance with Section K3 or, where the context so requires, the Plant and/or Apparatus treated as comprised in or assigned to such unit for the purposes of the Code.
Base Trading Unit	BSC Section K, 4.7: a Trading Unit (a "Base Trading Unit") is established in respect of each GSP Group. Subject to paragraph 4.7.3: each Supplier BM Unit shall automatically belong to the Base Trading Unit for the relevant GSP Group and each Exempt Export BM Unit in a GSP Group shall automatically belong to the Base Trading Unit for that GSP Group.

BSC Agent	BSC Section X-1: means the person or persons for the time being appointed for the purposes of providing the services specified (or as may be specified) in a BSC Service Description and as otherwise described in Section E.
BSC Company (BSCCo)	BSC Section X-1: means ELEXON Limited (or any successor to that company acting in the capacity as BSCCo).
Consumption Energy Account	Consumption Energy Account means an Energy Account designated by the CRA as a 'Consumption' Energy Account.
Delivery Site	A 'delivery site' is the actual physical locations delivering Short Term Operating Reserve.
Electricity Central Online Enquiry Service (ECOES)	ECOES is a central online database that holds information about each MSID in the GB electricity market.
Grid Supply Point Group (GSP Group)	BSC Section X-1: means a distinct electrical system, consisting of: (i) the Distribution System(s) which are connected to the Transmission System at (and only at) Grid Supply Point(s) which fall within one Group of GSPs, and (ii) any Distribution System which: (1) is connected to a Distribution System in paragraph (i), or to any other Distribution System under this paragraph (ii), and (2) is not connected to the Transmission System at any Grid Supply Point and the total supply into which is determined by metering for each half hour.
Half Hourly (HH)	Relates to Half Hourly Metering Equipment, which is defined in BSC Section X-1 as Metering Equipment which provides measurements on a half hourly basis for Settlement purposes.
Half Hourly Data Aggregator (HHDA)	BSC Section X-1: means a Data Aggregator which carries out the aggregation of metering data received from Half Hourly Data Collectors.
Master Registration Agreement (MRA) Development Board (MDB)	The MDB is a sub-committee of MRA Executive Committee (MEC) established in accordance with clauses 6.53 and 6.54 of the MRA.
Metering System Identifier (MSID)	BSC Section X-1: means a unique number relating to a Metering Point and which consists of the following: (i) a 2 digit number determined by reference to the Licensed Distribution System Operator; (ii) a 10 digit reference number provided by the relevant Licensed Distribution System Operator; (iii) a 1 digit check number provided by the relevant Licensed Distribution System Operator.
Party	BSC Section X-1: means a person who is for the time being bound by the Code by virtue of being a party to the Framework Agreement.
$SNBABSVD_{ij}$	Is the sum of all Line Loss Factor Adjusted MSID ABSVD for all MSIDs in a Supplier BM Unit.

Settlement Administration Agent (SAA)	BSC Section X-1: means the BSC Agent for Settlement Administration in accordance with Section E.
Settlement Period	BSC Section X-2: a period of 30 minutes beginning on the hour or the half-hour and in accordance with paragraph 4.3 of Annex X-2.
Settlement Run	BSC Section X-1: means a determination (in accordance with Section T), in relation to a Settlement Day, of amounts giving rise, on the part of Trading Parties and the Transmission Company, to a liability to pay to or a right to be paid by the BSC Clearer amounts in respect of Trading Charges in each Settlement Period in that Settlement Day, and of the net credit or debit in respect of such amounts; and where the context requires a reference to a Settlement Run includes the data and information produced by the SAA following such a determination and delivered to the FAA in accordance with Section N.
Short Term Operating Reserve (STOR)	Short Term Operating Reserve (STOR) is a service for the provision of additional active power from generation and/or demand reduction.
Supplier	BSC Section X-1: means a Party which holds a Supply Licence and is responsible for Exports and/or Imports for which such Party is required, by virtue of Section K, to register one or more SVA Metering Systems.
Supplier Volume Allocation Agent (SVAA)	BSC Section X-1: means the BSC Agent for Supplier Volume Allocation in accordance with Section E.
Supplier Volume Allocation (SVA) Metering System	Section K: means a Metering System which is or is to be registered in the Supplier Meter Registration Service.
Volume Allocation Run	Volume Allocation Run means a determination (for the purposes of Settlement), in relation to a Settlement Day, by way of Central Volume Allocation and/or Supplier Volume Allocation, of quantities of Active Energy Exported or Imported (or to be treated as Exported or Imported) by Parties in each Settlement Period in that Settlement Day; and where the context requires a reference to a Volume Allocation Run includes the data and information produced by the CDCA and/or SVAA following such a determination and delivered to the SAA in accordance with BSC Section R or S.

4. APPENDIX B – EXAMPLES OF HOW METERED DATA WILL BE USED TO ALLOCATE MSID PAIR DELIVERED VOLUMES TO THE CONSTITUENT MSIDS

This Appendix provides additional examples to illustrate the logic that will be used by SVAA to allocate ABSVD to the constituent MSIDs using MSID Pair Delivered Volumes and MSID-level HH metered data.

1) Signing convention for MSID delivered volumes:

A) Increased energy on the Transmission System

If the MSID Delivered Volume increased the energy on the **Transmission System**, the value submitted by teh TC should be signed positive ("+ve"). This indicates that the delivery site increased generation or reduced demand, leading to an increase in Export and/or a reduction in Import at the Settlement Meter. BR6.2 requires that SVAA allocate this to the Export MSID in the first instance (in recognition that some of the Export recorded on the Export MSID was a Balancing Service instructed by the TC, for which the Export Supplier should not be held responsible). However, it does not make sense to allocate a MSID Delivered Volume that is larger (in magnitude) than the HH metered data, so any remaining ABSVD will be allocated to the Import MSID.

Example 1 – where all of the MSID Delivered Volume can be allocated to the "preferred" MSID

MSID Pair Delivered Volume = +4 MWh

Export MSID metered volume ≥ 4 MWh

Import MSID metered volume immaterial

As the Export MSID metered volume is at least as big as the MSID Delivered Volume, all of the MSID Delivered Volume should be allocated to the Export MSID in the MSID Pair

SVAA will allocate +4 MWh ABSVD to the Export MSID (i.e. increasing the magnitude)

SVAA will allocate 0 MWh ABSVD to the Import MSID

Example 2 – where only part of the MSID Delivered Volume can be allocated to the "preferred" MSID

MSID Pair Delivered Volume = +4 MWh

Export MSID metered volume = 3 MWh

Import MSID metered volume = immaterial

As the Export MSID metered volume is less than the MSID Delivered Volume, only the value of the metered volume can be allocated to the Export MSID in the MSID Pair and the remainder allocated to the Import MSID in the MSID Pair (noting that this will reduce Demand)

SVAA will allocate +3 MWh ABSVD to the Export MSID (i.e. increasing the magnitude)

SVAA will allocate +1 MWh ABSVD to the Import MSID (i.e. decreasing the magnitude)

Example 3 – where none of the MSID Delivered Volume can be allocated to the "preferred" MSID

MSID Pair Delivered Volume = +4 MWh

Export MSID metered volume = 0 MWh

Import MSID metered volume = immaterial

As the Export MSID metered volume is zero (and therefore less than the MSID Delivered Volume), none of the metered volume can be allocated to the Export MSID in the MSID Pair and so the total amount should be allocated to the Import MSID in the MSID Pair (noting that this will reduce Demand)

SVAA will allocate 0 MWh ABSVD to the Export MSID

SVAA will allocate 4 MWh ABSVD to the Import MSID (i.e. decreasing the magnitude)

B) Reduced energy on the Transmission System

If the MSID Pair Delivered Volume reduced the energy on the **Transmission System**, the value submitted by the TC should be signed negative ("-ve"). This indicates that the Balancing Service provided had reduced generation or increased demand, leading to an increase in Import and/or a reduction in Export at the Settlement Meter. BR6.2 requires that SVAA allocate this to the Import MSID in the MSID Pair in the first instance (in recognition that some of the Import recorded on the Import MSID was a Balancing Service instructed by the TC, for which the Import Supplier should not be held responsible). However, it does not make sense to allocate a MSID Delivered Volume that is larger (in magnitude) than the HH metered data for the relevant component MSID, so any remaining volume will be allocated to the Export MSID.

Please note that this example does not apply to STOR because STOR volumes are always positive. But other Balancing Services such as Demand Turn Up may have negative volumes.

Example 4 – where all of the MSID Delivered Volume can be allocated to the "preferred" MSID

MSID Pair Delivered Volume = -4 MWh

Import MSID metered volume ≤ -4 MWh

Export MSID metered volume immaterial

As the magnitude of the Import MSID metered volume is at least as big as the magnitude of the MSID Delivered Volume, all of the MSID Delivered Volume should be allocated to the Import MSID in the MSID Pair

SVAA will allocate -4 MWh ABSVD to the Import MSID (i.e. increasing the magnitude)

SVAA will allocate 0 MWh ABSVD to the Export MSID

Example 5 – where only part of the MSID Delivered Volume can be allocated to the "preferred" MSID

MSID Pair Delivered Volume = -4 MWh

Import MSID metered volume = -3 MWh (i.e. increasing the magnitude)

Export MSID metered volume = immaterial

As the magnitude of the Import MSID metered volume is less than the magnitude of the MSID Delivered Volume, only the value of the metered volume can be allocated to the Import MSID in the MSID Pair and the remainder allocated to the Export MSID in the MSID Pair (with a change of sign to indicate that Generation has been increased)

SVAA will allocate -3 MWh ABSVD to the Import MSID (i.e. increasing the magnitude)

SVAA will allocate -1 MWh ABSVD to the Export MSID (i.e. decreasing the magnitude)

Example 6 – where none of the MSID Delivered Volume can be allocated to the "preferred" MSID

MSID Pair Delivered Volume = -4 MWh

Import MSID metered volume = 0 MWh

Export MSID metered volume = immaterial

As the Import MSID metered volume is zero (and therefore less than the magnitude of the MSID Delivered Volume), none of the metered volume can be allocated to the Import MSID in the MSID Pair and so the total amount should be allocated to the Export MSID in the MSID Pair (with a change of sign to indicate that Demand has been reduced)

SVAA will allocate 0 MWh ABSVD to the Import MSID

SVAA will allocate -4 MWh ABSVD to the Export MSID (i.e. decreasing the magnitude)

5. APPENDIX C – NOT USED

6. APPENDIX D – MSID PAIR FILE VALIDATION

The SVAA will validate the MSID Pair Allocation data it receives prior to recording that data on the SVA Metering System Balancing Services Register, as follows:

Validate Stage 1 – Schema Validation

The SVAA will validate the MSID Pair Allocation data from Suppliers / VLPs. The incoming data will be validated to ensure:

- Physical integrity; and
- That the data file contains all mandatory data items in the required formats in accordance with the SVA Data Catalogue

Validate Stage 2 – Business Logic Validation

The SVAA will validate the MSID Pair Allocation in accordance with the requirements in Section S. The MSID Pair Allocation will be validated to ensure that:

- it is from a valid Party (i.e. NETSO)
- a MSID may not be allocated to more than one MSID Pair at any given time
- each MSID within the MSID Pair is located within the same GSP group associated with the BM Unit to which they are to be allocated to; and
- the EFSD of the MSID Pair Allocation is at least 5 working Days ahead of the date of receipt of the MSID Pair

Validate Stage 3 – Data Validation

The SVAA will further validate MSID Pair Notifications to be allocated to Secondary BM Units against reference data held by the relevant SMRS and published on the Electricity Central Online Enquiry Service (ECOES). This validation will ensure that:

- a MSID must be a HH Metering System;
- a MSID must not be disconnected; and
- the MSID GSP Group has been recorded correctly.

7. APPENDIX E – MSID PAIR DELIVERED VOLUME VALIDATION

The SVAA will validate the MSID Pair Delivered Volume data it receives prior to allocating those volumes to the constitute MSIDs of the MSID Pair as follows:

Validate Stage 1 – Schema Validation

The SVAA will validate the aggregated MSID Pair Delivered Volume data from VLPs. The incoming data will be validated to ensure:

- Physical integrity
- That the data file contains all mandatory data items in the required formats in accordance with the SVA Data Catalogue

Validate Stage 2 – Business Logic Validation

The SVAA will validate the MSID Pair Delivered Volume in accordance with the requirements in Section S. The incoming data will be validated to ensure that:

- it is from a valid Party (i.e. NETSO)
- the MSID Pair Delivered Volume is for a valid MSID Pair in the SVA Metering System Balancing Services Register.