

Balancing and Settlement Code

BSC Service Description for BSC Central Services for Market-wide Half-Hourly Metering Systems

Version 0.93

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BSC Central Services Service Description**Version 0.93**

1. This document is the BSC Service Description for the BSC Central Services provided the Supplier Volume Allocation Agent (SVAA) as appointed by the Balancing and Settlement Code Company (BSCCo).
2. The services of the SVAA are defined in accordance with the Balancing and Settlement Code (the Code) and Balancing and Settlement Code Procedures (BSCPs).

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AMENDMENT RECORD

Version	Date	Description of Changes	Changes Included	Mods/ Panel/ Committee Refs
0.1	21/04/23	First Draft	MHHS Programme	
0.2	04/05/23	Internal Review	MHHS Programme	
0.3	23/05/23	Elexon Review	MHHS Programme	
0.4	27/07/23	Following Consultation	MHHS Programme	
0.5	01/09/23	Following Assurance Review	MHHS Programme	
0.6	27/09/23	Following CCAG Approval	MHHS Programme	
0.7	15/11/23	Mop up 1	MHHS Programme	
0.8	29/01/2024	Mop up 2	MHHS Programme	
0.9	09/05/2024	Consistency Checks	MHHS Programme	
0.91	25/07/2024	Following Consultation	MHHS Programme	
0.92	30/07/2024	For Finalisation	MHHS Programme	
0.93	08/08/2024	CR51 & CR53	MHHS Programme	

1. INTRODUCTION

1.1 Purpose

- 1.1.1 This document is the BSC Service Description for BSC Central Services provided by the SVAA as appointed by the Balancing and Settlement Code Company (BSCCo). The services of the SVAA are defined in accordance with the Balancing and Settlement Code (the Code) and Balancing and Settlement Code Procedures (BSCPs).
- 1.1.2 This Service Description defines the key roles of the SVAA in providing:
- The Load Shaping Service (LSS)
 - The Market-wide Data Service (MDS)
 - The Volume Allocation Service (VAS)
 - The Industry Standing Data Manager (ISDM)
- 1.1.3 The SVAA is also responsible for the calculation and provision of data for Asset Metering Systems, Half Hourly Replacement Reserve and Non-Final Demand Facility Demand.

2. SUPPLIER VOLUME ALLOCATION

In order to carry out the Data Marshalling Process and operate the SVA System to calculate Suppliers' Settlement charges, the SVAA shall operate and carry out the following.

2.1 Industry Data

- 2.1.1 Before each Load Shaping Run (LSR), MDS Run (MDSR) or Volume Allocation Run (VAR), the SVAA shall check whether the ISD has been updated and, if so, extract the updates into the SVA System in accordance with BSCP703 BSC Central Services (BSCP703).
- 2.1.2 Using the SVA System, the SVAA shall validate the ISD updates.
- 2.1.3 The SVAA shall inform the BSCCo or its nominated agent of any errors which occurred in validating the ISD, in accordance with BSCP703.
- 2.1.4 The SVAA shall maintain information related to each ISD update as specified in Appendix 1.

2.2 Data Service Data

- 2.2.1 Using the SVA System input, the SVAA shall validate every data submission from Data Services received before the deadline in the Master Settlement Timetable, on receipt of the data specified in BSCP703.
- 2.2.2 Whenever possible, but provided that the SVAA meets its obligations under this Service Description and BSCP703, the SVAA shall validate and then use the data received after the deadline in the Master Settlement Timetable.

- 2.2.3 In relation to any data received from a Data Service, the SVAA shall inform that Data Service, in accordance with BSCP703, of any validation errors and specify their nature.
- 2.2.4 Where the SVAA has received more than one data submission for the same UTC Date which has passed validation from the same Data Service designated for the same VAR, the SVAA shall use the file with the latest timestamp.
- 2.2.5 The SVAA shall maintain information relating to data received from Data Services as specified in Appendix 1.

2.3 Supplier, Virtual Lead Party, Asset Metering Virtual Lead and NETSO Data

- 2.3.1 The SVAA shall input and validate every data file received from a Supplier, an Asset Metering Virtual Lead Party (AMVLP), Virtual Lead Party (VLP) or the NETSO as indicated in the SVA Metering System and Asset Metering System Register, within the time period specified in BSCP602.
- 2.3.2 In relation to any data file received from an AMVLP, a VLP, a Supplier or the NETSO, the SVAA shall inform that Supplier, AMVLP, VLP or the NETSO, in accordance with BSCP602, of any validation errors and specify their nature.
- 2.3.3 Where the SVAA has received more than one data file which has passed validation from the same Supplier, AMVLP, VLP or the NETSO for the same Settlement Period, the SVAA shall use the file with the latest Sequence Number in the file header.
- 2.3.4 The SVAA shall maintain information relating to files received from Suppliers, AMVLPs, VLPs or the NETSO as specified in Appendix 1.

2.4 Activations Data

- 2.4.1 The SVAA shall input and validate every data file received from the Settlement Administration Agent (SAA) identifying activations made in relation to Replacement Reserve (an SVA Metering System Balancing Service).

2.5 Declarations relating to SVA Non-Final Demand Facilities

- 2.5.1 The SVAA shall input and validate every Declaration received from Suppliers identifying MSIDs linked to SVA Non-Final Demand Facilities for the purpose of notifying consumption volume for SVA Non-Final Demand Facilities to the NETSO.
- 2.5.2 In relation to any Declaration received from a Supplier, the SVAA shall inform that Supplier, in accordance with BSCP602, of successful validations, and any validation errors and specify their nature.
- 2.5.3 Where the SVAA has received more than one Declaration which has passed validation in respect of the same MSID, the SVAA shall update the details of the relevant Declaration using the latest file received.
- 2.5.4 The SVAA shall maintain information relating to Declarations received from Suppliers as specified in Appendix 1.

2.6 Half Hourly Asset Meter System ID (AMSID) Metered (HHDC) Data

- 2.6.1 Using the SVAA System, the SVAA shall input and validate every data file from a Half-Hourly Data Collector (HHDC) received within the time period from receipt of the file specified in BSCP703.
- 2.6.2 Whenever possible, but provided that the SVAA meets its obligations under this Service Description and BSCP703, the SVAA shall validate and then use a data file received from a HHDC after the deadline specified in BSCP703.
- 2.6.3 In relation to any data file received from an HHDC, the SVAA shall inform that HHDC, in accordance with BSCP703, of any validation errors and specify their nature.
- 2.6.4 Where the SVAA has received more than one data file which has passed validation from the same HHDC, the SVAA shall use the file with the latest Run number in the file header.
- 2.6.5 The SVAA shall maintain information relating to files received from HHDCs as specified in Appendix 1.

2.7 GSP Group Take Data

- 2.7.1 Using the SVA System, the SVAA shall input and validate every data file received from the Central Data Collection Agent (CDCA), within the time period from receipt of the file specified in BSCP703.
- 2.7.2 Whenever possible, but provided that the SVAA meets its obligations under this Service Description and BSCP703, the SVAA shall validate and then use a data file received from the CDCA after the deadline in the SVAA Calendar.
- 2.7.3 In relation to any data file received from the CDCA, the SVAA shall inform the CDCA, in accordance with BSCP703, of any validation errors and specify their nature.
- 2.7.4 Where the SVAA has received more than one data file which has passed validation from the CDCA designated for the same VAR, the SVAA shall use the file with the latest Run number in the file header.
- 2.7.5 The SVAA shall notify the BSCCo or its nominated agent without delay in the event that the SVAA receives a data file from the CDCA after the deadline in the SVAA Calendar.
- 2.7.6 The SVAA shall maintain information relating to files received from the CDCA as specified in Appendix 1.

2.8 Line Loss Factor Data

- 2.8.1 Using the SVA MDS System, the SVAA shall input and validate every data file received from the BSCCo or its nominated agent, within the timescale agreed between the BSCCo or its nominated agent and SVAA.
- 2.8.2 In relation to any data file received from the BSCCo or its nominated agent, the SVAA shall inform the BSCCo or its nominated agent, in accordance with BSCP703, of any validation errors and specify their nature.

2.8.3 Following the deadline for the provision of Line Loss Factors in accordance with BSCP703, the SVAA shall inform the BSCCo or its nominated agent of any Line Loss Factor Identifiers for which data are missing.

2.8.4 The SVAA shall maintain information relating to files received from Licensed Distribution System Operators (LDSOs) as specified in Appendix 1.

2.9 Standing Data and Other Parameters Input by the SVAA

2.9.1 The SVAA shall maintain the standing data and manage the process for Supplier approval of automated standing data updates in accordance with BSCP507.

2.9.2 The SVAA shall advise the Central Registration Agent of changes to its contact details, in accordance with BSCP507.

2.9.3 The SVAA shall date and timestamp all MSID level Balancing Mechanism Unit data received from a Supplier, via its nominated Balancing Mechanism Unit representative, on every day of the year, in accordance with BSCP507.

2.9.4 Before each VAR, the SVAA shall check whether the standing data has been updated and, if so, translate the updates into the SVA System before the VAR.

2.9.5 The SVAA shall enter into the SVA System any parameters required to make it function correctly.

2.9.6 The SVAA shall record details about standing data and other input parameters from time to time entered into the SVA System, together with any relevant validation messages, as specified in Appendix 1.

2.9.7 Where the data has originated from a source designated as a valid Data Service in ISD, but has failed validation as defined in BSCP703 due to a conflict with the Registration data:

2.9.7.1 *Loading of this data will produce an IF/PUB 014 'Rejected - UTC Settlement Period Consumption Data' exception report containing a warning message that describes the discrepancy.*

2.10 Invoking Market-wide Data Service Runs (MDS Runs) and Annual Consumption Calculations

2.10.1 The MDS shall act in accordance with the Master Settlement Timetable. The SVAA shall invoke the SVA MDS System (using the version of the system agreed from time to time with the BSCCo or its nominated agent) in accordance with the Master Settlement Timetable for the specific GSP Groups, Settlement Days and run types, unless instructed otherwise by the BSCCo or its nominated agent.

2.10.2 Each year during January (and after publication of the Master Settlement Timetable) the BSCCo shall produce and publish¹ a 'Post Final Settlement Calendar' scheduling all the 'DF' runs capable of being scheduled for that calendar year. The SVAA shall receive this during mid-February each year and shall invoke MDS Runs as determined by the 'MDS Run' dates included in this calendar.

¹ The SVAA may be required to review a draft version of the Post Final Settlement Calendar before approval and publication by BSCCo.

- 2.10.3 Before invoking a MDS Run, the SVAA shall identify any missing data and consumption on de-energised MSIDs from the relevant originator. The MDS shall default the data for the MSID to the appropriate Load Shape. The MDS shall report to the originator the MSIDs with consumption on de-energised MSID and Default Load Shape data where MSID data is missing on the Data Integration Platform (DIP) using the IF-013 / PUB-013 'Notification of Defaulted UTC Settlement Period Consumption Data'. The sending of IF-013 will be restricted until the SF Settlement Run.
- 2.10.4 MDS shall be able to re-run a Market-wide calculation and increment the Run Number. If notified by BSCCo MDS shall undertake a re-run (e.g. for failed validation) with corrected data.
- 2.10.5 MDS shall be able to re-run a Market-wide calculation for audit purposes and increment the Run Number. If notified by BSCCo MDS shall undertake a re-run with the same data it used for the normal MDS Run as per the Master Settlement Timetable.
- 2.10.6 MDS shall be able to run ad-hoc Market-wide calculations following a Trading Dispute. MDS shall identify Settlement day and MSIDs to be re-run for Trading Disputes as notified by BSCCo.
- 2.10.7 The MDS shall receive and access Registration data applicable to MSIDs being processed (and defined in ISD) so that it can process MSID data in the MDS run. The MDS will use the most recent Registration data associated with the UTC Period being processed in the MDS calculations.
- 2.10.8 The MDS shall access the latest UTC period Consumption data using the DIP timestamp. MDS will use updated data in later Settlement Runs. If there are duplicates MDS will use the latest DIP timestamp (if the same timestamp use the MSID data received first). For each MSID for each Settlement Period, MDS shall validate against a configurable maximum value (set by BSCCo), that it is not negative for import MSIDs, or if it has a '0' estimation flag, so that it can process MSID meter data in the MDS run. Any errors reported in exception reports to Market Participants. MDS shall store the identity of the Data Service provider.
- 2.10.9 The MDS shall access the SVA storage facilities register which contains identification of MSIDs which are used for storage and SVA Metering Systems Register for MSID/BM Unit mapping for Additional Primary BM Units from Other BSC systems.
- 2.10.10 The MDS shall access the published Industry Standing Data.
- 2.10.11 MDS shall use most recent Industry Standing Data applicable to the Settlement Day and Settlement Period being processed including Line Loss Factor data.
- 2.10.12 MDS shall process according to the Settlement Day, which is in Clock Time.
- 2.10.13 The MDS shall access Load Shapes for Defaulting purposes from the published source.
- 2.10.14 MDS shall allocate MSIDs to BM Units and Additional Primary BM Units. (and identify MSIDs for Storage using the SVA Storage facilities register). It shall also use ISD and Registration data to allocate MSIDs to Consumption Component Classes.
- 2.10.15 The MDS shall output Active Import (AI) and Active Export (AE) data in MWh to 6 decimal places and in Clock Time.

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- 2.10.16 The MDS shall process the non-standard Spring Clock Change Settlement Day by accommodating for the variation in Settlement Periods.
- 2.10.17 The MDS shall Process the non-standard Autumn Clock Change Settlement Day by accommodating for the variation in Settlement Periods.
- 2.10.18 An aggregation run shall, for each Supplier and each Settlement Period, sum to the level of Consumption Component Class and GSP group taking into account the Line Loss Factor Id of the Metering System for the Settlement Day for which the run is being undertaken.
- 2.10.19 The MDS shall determine line losses separately from the consumption / export data. That is, for each Settlement Period there would be an associated line loss value per consumption value. MDS will report to BSCCo any defaulted Line Loss Factor values.
- 2.10.20 The MDS shall count the number of metering systems contributing to each Consumption Component Class as part of its output to the VAS.
- 2.10.21 The MDS shall identify incomplete data per Settlement Period for each energised MSID for the Settlement Day.
- 2.10.22 The Final Reconciliation run data is considered final for all MSIDs except those subject to the resolution of a Trading Dispute. The Trading Dispute Committee (TDC) will identify MSIDs that are subject to the dispute. Any data received by MDS after the final reconciliation run will not be processed in the dispute unless the data is for those MSIDs identified for TDC.
- 2.10.23 The MDS shall apply relevant Load Shapes where there are missing consumption volumes for energised MSIDs.
- 2.10.24 MDS shall store a date/time defining when the MDS run was undertaken and stored. MDS shall set and store the Run Number.
- 2.10.25 The MDS shall produce uncorrected Consumption data aggregated to Consumption Component Class level, per supplier, GSP and supplier BM Unit (base or additional) for VAS.
- 2.10.26 The MDS shall report MSIDs that fail HH data validation, missing data and defaulting to Market Participants (including Data Services) and BSCCo. The MDS shall notify the use of Defaulted Data by MSID and de-energised MSIDs with data by Settlement Period and Settlement Day to Suppliers and relevant Data Services (SDS, ADS and UMSDS).
- 2.10.27 The MDS shall produce data for Performance Assurance to BSCCo.
- 2.10.28 The MDS shall aggregate Line Loss Volumes by Consumption Component Class by summing MSID Line Loss Volumes.
- 2.10.29 For each Settlement Period the MDS shall validate that processing has completed correctly without error prior to MDS reporting.
- 2.10.30 MDS shall investigate a validation failures and correct the failures where required (the validation failure includes those notified by VAS to MDS). If it is determined, that it

is a non-issue MDS shall override the validation and pass data to MDS reporting and provide data to VAS. If unresolved MDS shall notify BSCCo for a course of action. If no error is identified data is assumed to be correct.

- 2.10.31 MDS shall report data to relevant parties.
- 2.10.32 The MDS Settlement runs shall be configurable for each working day. The MDS shall be able to undertake up to 14 settlement runs per day.
- 2.10.33 The MDS shall be able provide Other BSC Systems the Settlement Period Consumption and associated losses at MSID level, identified by Consumption Component Class Id, for use in other Settlement calculations (e.g. Wider Access).
- 2.10.34 MDS shall provide data to EMRS for CfD and Capacity Mechanism purposes. MDS receives notification from Suppliers of the MSID data it needs to report on to EMRS.
- 2.10.35 VAS shall notify MDS if an error is found in the MDS data during the Volume Allocation Run. MDS shall investigate the issue for resolution. If MDS is unable to resolve the issue it shall request a course of action from BSCCo.
- 2.10.36 MDS shall select MSIDs to calculate an updated Annual Consumption to be issued on a monthly basis. The Market-wide Data Service shall calculate an Annual Consumption for a newly created MSID within 30 calendar days following notification of the set-up of that MSID in MHHS-IF-036 'Registration Service Notification of Service Appointment & Supporting information' or 'MHHS-IF-001 'Notification of change of Supplier'.
- 2.10.37 MDS shall calculate the Annual Consumption and set the Annual Consumption Quality for an MSID in line with the monthly schedule for each MSID.
- 2.10.38 MDS shall publish the Annual Consumption, Annual Consumption Quality and Annual Consumption Effective From Date on the DIP using the IF-040 / PUB-040 'Notification of Calculated Annual Consumption'.
- 2.10.39 The number of VAS Settlement runs shall be configurable for each working day. The MDS shall carry out up to 14 Runs per Working Day.
- 2.10.40 Where the DIP, Managed Data Network or the NETA NETWORK (NETANET) has been non-operative such that the Services provided will obviously be affected, the SVAA shall contact the BSCCo or its nominated agent for advice about rescheduling the MDS Runs.
- 2.10.41 In respect of missing Line Loss Factor data not received and validated by the relevant deadline for an Initial MDS Run or Reconciliation MDS Run, the SVAA shall take the following action:
 - 2.10.41.1 *Missing Line Loss Factor data - use a default value of '1.0'*
- 2.10.42 When a Demand Disconnection has occurred as part of a Demand Control Event, the MDS will process adjusted aggregated energy volumes for the affected settlement date(s) as part of a timetabled Reconciliation Run.

- 2.10.43 On receipt of a D0297, MDS must validate whether the MPANs have Registration data.
- 2.10.44 On receipt of a D0297, MDS must validate the BMU allocation as per the Balancing and Settlement Code Multiple BM Unit Instruction Processing Specification.
- 2.10.45 Where the content of the BMU Allocation in the D0297 is considered valid, MDS must register this mapping and send a Confirmation of BM Unit Allocation to the Supplier on a D0294.
- 2.10.46 Where the content of the BMU Allocation in the D0297 is considered not valid, MDS must not register this mapping, and must send a Rejection of BM Unit Allocation to the Supplier on a D0295.

2.11 Invoking Volume Allocation Runs (VARs)

- 2.11.1 The SVAA shall invoke the SVA VAS System (using the version of the system agreed from time to time with the BSCCo or its nominated agent) in accordance with the SVAA Calendar for the specific GSP Groups, Settlement Days and run types, unless instructed otherwise by the BSCCo or its nominated agent. VAS must be able to perform Volume Allocation Runs for single or multiple GSP Groups. VAS shall store a date/time defining when the VAS run was undertaken and stored. VAS shall set and store the Run Number.
- 2.11.2 The SVAA shall receive the Master Settlement Timetable during mid-February each year and shall invoke VAR Runs as determined by the 'VAS Run' dates therein.
- 2.11.3 The VAS shall access the Master Settlement Timetable as part of ISD.
- 2.11.4 The VAS shall act in accordance with the Master Settlement Timetable.
- 2.11.5 VAS shall identify the Settlement Day for its run in accordance with Master Settlement Timetable.
- 2.11.6 VAS shall be able to re-run a VAS calculation as directed by the BSC Panel.
- 2.11.7 VAS shall undertake a re-run with the same data it used for the normal VAS Run as per the Master Settlement Timetable.
- 2.11.8 VAS shall undertake a re-run (e.g. for failed validation) with corrected data.
- 2.11.9 VAS shall be able to re-run a VAR calculation for audit purposes. If notified by BSCCo.
- 2.11.10 VAS shall process Active Import (AI) and Active Export (AE) data in MWh up to 6 decimal places.
- 2.11.11 VAS shall process data in Clock Time and per Settlement Day.
- 2.11.12 VAS shall be able to re-run a VAS calculation and increment the Run Number. If notified by BSCCo.

- 2.11.13 The SVAA shall maintain information relating to VARs in a log containing the information specified in Appendix 1.
- 2.11.14 Where the Managed Data Network or the NETA NETWORK (NETANET) has been non-operative such that the Services provided will obviously be affected, the SVAA shall contact the BSCCo or its nominated agent for advice about rescheduling the VAR(s).
- 2.11.15 VAS shall be able to run ad-hoc VAS calculations following a Trading Dispute.
- 2.11.16 The VAS shall access the published Industry Standing Data.
- 2.11.17 VAS shall use most recent ISD Data applicable to the Settlement Day being processed.
- 2.11.18 VAS shall access BM Unit Data from other BSC systems.
- 2.11.19 VAS shall access SP Level data (aggregated per Supplier BM Unit and per Consumption Component Class) from MDS.
- 2.11.20 VAS shall identify where there is missing MDS consumption data and notify MDS and BSCCo.
- 2.11.21 For missing Market-wide Data Service data - where the MDS cannot resolve the issue, BSCCo will notify VAS to substitute data and identify what MDS data to use for that Settlement Day.
- 2.11.22 Where data relates to a Balancing Mechanism Unit file and has failed validation due to an invalid Balancing Mechanism Unit, the SVAA shall assign the energy value for the failed Balancing Mechanism Unit to the Base Balancing Mechanism Unit in accordance with BSCP703.
- 2.11.23 VAS shall access GSP Group Take from CDCA.
- 2.11.24 VAS shall validate CDCA data.
- 2.11.25 If the CDCA data is missing, then VAS contacts CDCA for the data. If it is incorrect or missing, then VAS should stop and ask BSCCo/Panel what to do. BSCCo will notify the defaults for CDCA data.
- 2.11.26 In respect of missing GSP Group Take data not received and validated by the relevant deadline for an Interim Information VAR, the SVAA shall take the following action:
- 2.11.26.1 *Missing GSP Group Take data - seek and follow the instruction from the BSCCo or its nominated agent as to the appropriate data to substitute.*
- 2.11.27 The VAS shall process the non-standard Spring Clock Change Settlement Day by accommodating for the variation in the number of Settlement Periods.
- 2.11.28 The VAS shall process the non-standard Autumn Clock Change Settlement Day by accommodating for the variation in the number of Settlement Periods.
- 2.11.29 The VAS shall carry out up to 14 Runs per Working Day.

- 2.11.30 VAS shall calculate Supplier Deemed Take and BM Unit Allocated Demand Volume. This value can be positive or negative. VAS shall calculate and Period BMU SVA Gross Demand.
- 2.11.31 The SVAA shall allow the Supplier Deemed Take by BM Unit to be either positive or negative (that is, negative consumption should not be treated as spill and should not be allocated to other Suppliers) as per BSCP703.
- 2.11.32 VAS shall investigate a validation failure to correct the failure. If non-issue VAS shall override the validation and pass data to VAS reporting and provide data to SAA. If unresolved VAS shall notify BSCCo for a course of action. If no error is identified data is assumed to be correct. VAS shall notify estimated data for each BM Unit to the SAA for every occasion that an Initial VAR is required but could not be completed.

GSP Group Correction

- 2.11.38 VAS shall calculate GSP Group Correction Factors. It uses the BM Unit allocated volumes, GSP Group Take and Scaling Weights from ISD.
- 2.11.39 VAS run must stop and alert Operator if the GSP Group Correction value is outside a configurable range.
- 2.11.40 VAS shall correct BM Unit allocated volumes by applying GSP Group Correction Factors using the associated Scaling Weights.

VAS Validation of Output

- 2.11.41 VAS shall validate VAR calculations against configured tolerances. VAS shall provide the ability to specify configurable System Parameters these include Group GCF tolerance and GSP Group Take and Uncorrected Volume Tolerances.
- 2.11.42 VAS shall alert BSCCo about threshold/tolerance breaches.
- 2.11.43 The VAS shall provide the GSP Group Factors to Other BSC Systems for other Settlement calculations (e.g. Wider Access).

SVAA Recording and Reporting of Data and Issues

- 2.11.44 The SVAA shall maintain a record of all contact with, and attempts to contact, originators of missing data as specified in Appendix 1.
- 2.11.45 The SVAA shall record the occurrence of, and investigate the reasons for, any VAR failure and report that information without delay to the BSCCo or its nominated agent.
- 2.11.46 Where any VAR cannot be completed, the SVAA shall agree remedies with the BSCCo or its nominated agent, the Settlement Administration Agent and, if appropriate, the CDCA and the Funds Administration Agent to ensure that the output will be delivered to the Settlement Administration Agent in accordance with the Funds Administration Agent Calendar, or as soon as possible thereafter.
- 2.11.47 In the event that the SVAA is unable to complete an Initial VAR, due to missing data from MDS or CDCA, the VAS shall use replacement data at BSCCo's discretion to

re-run by BM Unit, as per a normal VAS run. Substituted data must be reported to Market Participants.

2.11.48 When a Demand Disconnection has occurred as part of a Demand Control Event, the SVAA will receive and process adjusted aggregated energy volumes for the affected settlement date(s) as part of a timetabled Reconciliation Run.

2.11.49 The SVAA shall report details of any defaulted data to the relevant Suppliers, LDSOs and the BSCCo or its nominated agent.

2.12 Provision of Output

2.12.1 The SVAA shall produce and distribute the reports (and optional reports) output from the SVA System in accordance with BSCP703, BSC Section D Part 5 and BSC Section V Table 7.

2.12.2 The SVAA shall maintain information relating to all output reports despatched with their date-stamps. This log shall include the information specified in Appendix 1, and cover the output from the SVA System Performance Monitoring Reports and all communications received or made with regard to errors in the Settlement Process or disputes arising from such errors.

2.12.3 SVAA shall be able to provide Ad Hoc information to the BSCCo or its nominated agent on request. The SVAA shall provide information on any file despatched on request to any authorised recipient of that file and to the BSCCo or its nominated agent.

2.12.4 The SVAA shall inform all authorised recipients and the BSCCo or its nominated agent of any missing or delayed reports as soon as it becomes aware that such a delay will be inevitable.

2.12.5 The SVAA shall re-send output reports, to a recipient requesting a re-send.

2.12.6 The SVAA shall monitor the performance of its systems and evaluate continually. Alerts shall be raised where service performance is degraded for a certain duration.

2.13 Aggregated Settlement Data to LDSOs

2.13.1 The SVAA shall provide each Host LDSO² with aggregated settlement data (Supplier data aggregated up to LDSO level) for Metering Systems on other LDSO networks within the distribution licence area, with the exception of Metering Systems registered to DUoS Tariff Id for which the Host LDSO has instructed SVAA (in accordance with paragraph 2.13.3) not to provide data.

2.13.2 The SVAA shall provide aggregated settlement data to Host LDSOs in accordance with BSCP703.

2.13.3 Any instruction to exclude one or more DUoS Tariff ID from the aggregated settlement data shall be provided to the SVAA by the Host LDSO using the functionality provided for that purpose by the Elexon Portal, or (in the event that that functionality is unavailable) via Elexon Support.

² A 'Host LDSO' is an LDSO operating a distribution network that is directly connected to the Transmission System in their own distribution licence area.

2.14 SVAA Calculations for Asset Metering Systems

- 2.14.1 Where an AMHHDC has submitted Actual data for an AMSID for a Settlement Date, either as specified in BSCP703 or subsequently, and it has been processed in the first available VAR, there is no obligation on the AMHHDC to submit data for that AMSID for any subsequent VAR. This shall not be considered 'missing data' for the purposes of paragraph 2.11.36.

2.14.1.1 The SVAA shall reuse the data for each subsequent VAR, subject to paragraph 2.14.1.2;

2.14.1.3.2 If the AMHHDC submits revised data at any time before the Final Reconciliation VAR, the SVAA shall use such revised data for that AMSID in the first available VAR. Such data shall not be considered 'substituted data' for the purposes of paragraph 2.14.5.

- 2.14.2 Where a HHDC has submitted estimated data for an AMSID for a Settlement Date, either as specified in BSCP508 or subsequently, and it has been processed in the first available VAR, the Half Hourly Data Collector shall be required to submit Actual data for that AMSID for the next scheduled VAR.
- 2.14.3 Where the MDS has not submitted Half Hourly Metering System Metered Data (via a ELEX-REP-030 MSID data for Other BSC Systems) for a VAR, or a HHDC has not submitted Actual Half Hourly Asset Metering System Metered Data (via a D0390) for an AMSID for a Settlement Date for the Initial Settlement (SF) VAR, this shall be considered 'missing data' for the purposes of paragraph 2.14.5, and the SVAA shall issue a P0310 'Missing Metering System Data' to the relevant Supplier, or the HHDC and relevant AMVLP, as appropriate.
- 2.14.4 Where an HHDC has submitted a D0385, or an HHDC has submitted a D0390, which fails validation, the SVAA shall issue a P0311 'Invalid Metering System Data' to the relevant Supplier, or the HHDC and relevant AMVLP, as appropriate.
- 2.14.5 The SVAA shall report details of any substituted data pursuant to 2.14.1 to the relevant Suppliers, LDSOs and the BSCCo or its nominated agent, in accordance with BSCP703.

2.15 Half Hourly Replacement Reserve Data

- 2.15.1 The SVAA shall provide in relation to accepted Replacement Reserve Bids:

2.15.1.1 Secondary Half Hourly Delivered Volumes to Suppliers;

2.15.1.2 Secondary Half Hourly Consumption Volumes to VLPs; and

2.15.1.3 Secondary Half Hourly Demand Volumes and Secondary Half Hourly Delivered Volumes to the SAA.

2.16 Non-Final Demand Facility Demand Data

2.16.1 The SVAA shall provide to the NETSO in relation to Imports from the SVA Storage Facilities Register (for Non-Final Demand Facilities) linked with a valid Declaration(s) held by SVAA:

2.16.1.1 *Storage Corrected Component (also known as Corrected Period BMU Gross HH Demand);*

2.16.1.2 *Period BM Unit Gross Storage Demand (also known as Period BMU Gross Non-Final Demand);*

2.16.1.3 *Daily Period BM Unit Gross Storage (also known as Daily BMU Gross HH Non-Final Demand); and*

2.16.1.4 *Daily Storage Corrected Components (also known as Corrected Daily BMU Gross HH Demand).*

2.17 Additional VARs

- 2.17.1 On request by the BSCCo or its nominated agent, the SVAA shall invoke the MDS and BSC Central Systems for additional VARs, or run a module of the Systems, using the specified input data.
- 2.17.2 Following any additional VAR of the SVA System, or module thereof, carried out in accordance with paragraph 2.17.1, the SVAA shall distribute the output reports as requested by the BSCCo or its nominated agent.
- 2.17.3 Where requested by the BSCCo or its nominated agent, the SVAA will produce and provide the VAR Equitability Report to the BSCCo or its nominated agent.

2.18 Performance Monitoring Reports

- 2.18.1 SVAA shall capture and retain all data required for use in the Performance Assurance Framework as defined by the BSC Panel.
- 2.18.2 The SVAA shall provide complete and accurate monthly routine Performance Monitoring Reports to the BSCCo or its nominated agent within 5 Working Days before the end of the month.
- 2.18.3 The SVAA shall provide complete and accurate reports to the BSCCo or its nominated agent within 5 Working Days from receipt of the request. This timeframe can be extended upon authorisation from the BSCCo or its nominated agent.
- 2.18.4 The SVAA shall provide the information specified in Appendix 1 to the BSCCo or its nominated agent on request.

3. LOAD SHAPING RUNS

For each Settlement Day defined in the Master Settlement Timetable, the SVA LSS System produces Load Shapes for use in the MDS Settlement runs and for use by the Data Services in the estimation of UTC Settlement Period Level Consumption. In providing this service the SVAA shall carry out the following duties and actions.

3.1 The Master Settlement Timetable

- 3.1.1 The LSS shall be able to access the Master Settlement Timetable (publish mechanism will be part of ISD). The Master Settlement Timetable shall include the day type for each UTC date.
- 3.1.2 The LSS shall act in accordance with the Master Settlement Timetable.

3.2 Accessing Registration Data, ISD and Actual UTC Settlement Period Level Consumption

- 3.2.1 The LSS shall access each UTC Period Consumption flagged as actual ('A' flag) for the UTC Date. The LSS shall access, process and publish UTC Period Consumption data in Coordinated Universal Time (UTC) and in kilowatt hours (kWh) up to three decimal places.

- 3.2.2 LSS shall obtain ISD data from the master source.
- 3.2.3 The LSS shall use the most recent ISD data applicable to the UTC Date that defines the Load Shape Categories so that it can assign the MSIDs to Load Shape Categories.
- 3.2.4 The LSS shall access specific registration data items defined in the Load Shape Category table in ISD so that it can allocate MSIDs to Load Shape Categories.
- 3.2.5 LSS shall be able to identify the registration data appropriate to the UTC Date being processed.
- 3.2.6 The LSS shall use the most recent Registration data associated with the UTC Period being processed in the LSS generation calculations.

3.3 LSS re-runs

- 3.3.1 The LSS shall be able to re-run a Load shaping calculation with revised and or additional data. This can be prior to and post publication.

3.4 Invoking the LSS Run

- 3.4.1 The LSS shall use the version of the SVA LSS System software specified to it by the BSCCo or its nominated agent.
- 3.4.2 The LSS shall run the LSR in accordance with instructions received from the BSCCo or its nominated agent in addition to the requirements of the Master Settlement Timetable.
- 3.4.3 The LSS shall undertake the calculations set out in BSC Section S Annex S3 and in accordance with the procedures set out in BSCP703.

3.5 Data Input by the LSS

- 3.5.1 The LSS shall enter those items of data normally required to make the SVA LSS System function correctly.
- 3.5.2 The LSS shall provide previously calculated Load Shape data to Suppliers at their request.
- 3.5.3 The LSS shall maintain a record of any input data that arrives after the due date and time specified in the Master Settlement Timetable and the action taken by the LSS to obtain them. This information shall be available to the BSCCo or its nominated agent on request.

3.6 Validation the LSS Run

- 3.6.1 The LSS shall validate that processing has completed correctly without error prior to the publishing of the LSS data and notifying to MDS. If validation fails an investigation into the cause of failure shall be undertaken to correct the validation failure and the LSS calculations shall be re-run. If no error is identified the data is assumed to be correct. For each UTC Period the LSS shall validate that the Load Shape is within a configurable [x%] of the most recent Load Shape for the same Category and Day Type. If Validation fails it shall default to the previous Day Type for that

Load Shape category (default flag to be applied for each UTC Period). The defaulted UTC Periods shall be 'D' Flagged for each UTC Period.

- 3.6.2 The LSS shall investigate, record and report immediately to the BSCCo or its nominated agent the occasions and reasons for any run failures.
- 3.6.3 The LSS shall report those instances where data is manifestly in error or suspected by the LSS to be unreasonable to the BSCCo or its nominated agent immediately, unless instructed otherwise by the BSCCo or its nominated agent.
- 3.6.4 The SVAA shall support the resolution of any queries associated with LSS data as described in BSCP01 and will liaise as necessary with the Disputes Administrator.

3.7 LSS Publish and Storage

- 3.7.1 For each UTC Period the LSS shall check the output was correct before publishing.
- 3.7.2 The LSS should publish Load Shape Data, in the agreed format via the DIP for every period in the UTC Date including Load Shape Totals using the IF-022 / PUB-022 'Load Shape Period Data' and the IF-023 / PUB-023 'Load Shape Totals Data'.
- 3.7.3 The LSS shall provide Load Shaping data for ad-hoc requests.
- 3.7.4 The LSS shall publish Load Shape Data, on the BSC website in a manner that is available to the public to access from six months after MHHS Milestone M11.
- 3.7.5 The LSS shall retain MSID level data for 40 months to allow for the reproduction of Load Shapes where required.
- 3.7.6 The LSS shall store all Load Shape data by Load Shape Category including Default Averages, MSID counts and default flags for 10 years to allow for future review and audit when required.
- 3.7.7 The LSS shall store a date/time defining when the Load Shape run was undertaken and stored.

3.8 Calculation of Secondary Half Hour Volumes

- 3.8.1 The SVAA shall calculate Secondary Half Hour Delivered Volumes, Secondary Half Hour Demand Volumes and Secondary Half Hour Consumption Volumes in accordance with BSCP703.

3.9 Provision of Output

- 3.9.1 The SVAA shall produce and distribute the reports output from the SVA System in accordance with BSCP703.
- 3.9.2 The SVAA shall provide these output reports in accordance with the timescales specified in BSCP703 and maintain a record of all files despatched with the date stamps and the due time/date of despatch.
- 3.9.3 The SVAA shall provide this information to the BSCCo or its nominated agent on request.

- 3.9.4 The SVAA shall only re-send output reports to a recipient requesting a re-send.
- 3.9.5 The SVAA shall despatch reports by one of the available media defined in the BSCP703 and chosen by the recipient. The SVAA shall not despatch individual reports to recipients who have elected not to receive them.
- 3.9.6 The SVAA shall provide on request to any authorised recipient and the BSCCo or its nominated agent information on the files despatched.

4. INDUSTRY STANDING DATA (ISD)

4.1 Receiving Updates to the ISD

- 4.1.1 The SVAA, in the role of ISD Manager (ISDM), shall receive updates to the ISD from the BSCCo or its nominated agent, via an ISD Change Request and in accordance with BSCP707, 'Changes to Industry Standing Data'.
- 4.1.2 Where a Balancing Mechanism Unit file is received from the Central Registration Agent, the ISDM shall not publish this file until a request is received to publish this file from the BSCCo or its nominated agent, in accordance with paragraph 4.1.1 above.
- 4.1.3 The ISDM shall receive annually from the SAA a draft Settlement Calendar and shall review it in accordance with BSC Section U. The ISDM shall create the Master Settlement Timetable which includes the LSS, CDCA, MDS, VAS, SAA and FAA timetables. The ISDM shall store the Master Settlement Timetable.
- 4.1.4 In support of paragraph 4.1.2 above, upon receipt of the Balancing Mechanism Unit file the ISD shall notify the BSCCo or its nominated agent that the Balancing Mechanism Unit file has been received and, if requested, provide the file to the BSCCo or its nominated agent.
- 4.1.5 The ISDM shall be able to store Line Loss Factor data. ISDM shall make available previous published versions of data to participants on request. The ISD data store will contain both the current and previous versions of ISD.
- 4.1.6 The ISDM shall version and record changes at Catalogue level and change status. The ISDM shall check that the version numbers of the updates received from the BSCCo or its nominated agent are consecutive. In the event that the update versions are not consecutive, it shall contact the BSCCo or its nominated agent to inquire as to the existence of missing updates and, if in existence, to request their transmission.
- 4.1.7 The ISDM shall be able to provide details of previous ISD versions of change workflows, for example auditing purposes.
- 4.1.8 The ISDM shall be able to receive ISD data changes from BSCCo.
- 4.1.9 If validation fails the ISDM shall report to BSCCo and an investigation into the cause of failure shall be undertaken to correct the validation failure and the ISD data shall be re-validated. If no error is identified data is assumed to be correct.
- 4.1.10 ISDM shall make available the entire current data set to LSS, MDS and VAS. This includes the Master Settlement Timetable to all 3 services and Line Loss Factor data to MDS.

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- 4.1.11 The ISDM shall make available the entire current data set to Market participants. This will be a configurable file location. This will be a file location on the hosting platform (provided by Elexon). The data will be available in the 3 separate groupings; (1) Line Loss Factor data, (2) Master Settlement timetable and (3) ISD data (including UMS data). The ISD data location will be published on the DIP using the IF-047 / PUB-047 'Notification of the Publication of a Downloadable Asset'.
- 4.1.22 The ISDM shall be able to publish the specific changed ISD data (at entity level) sets within ISD. This will be a file location on the hosting platform (hosted by Elexon) which will be a configurable file location. The data will be available in the 3 separate groupings; (1) Line Loss Factors data, (2) Master Settlement Timetable and (3) ISD data (including UMS data).
- 4.1.13 The ISDM shall be able to re-publish ISD data where errors have been flagged during the DIP ISD processing stage.
- 4.1.4 The ISDM shall allow participants the ability to access specific ISD entities (one or more).
- 4.1.15 Should the ISDM be unable to incorporate data because it is in the wrong format (for example, alphanumeric instead of numeric) it shall report the matter to the BSCCo or its nominated agent, and not incorporate any part of the update to the ISD.
- 4.1.16 The ISDM shall incorporate all authorised updates into the ISD, in sequence order of the version numbers, in accordance with BSCP707.
- 4.1.17 Should any recipient question the correctness of part of the ISD, then the ISDM shall report the matter to the BSCCo or its nominated agent and agree a remedy with the BSCCo or its nominated agent.
- 4.1.18 ISD data shall be stored in the ISD data store on the hosting platform provided by Elexon.
- 4.1.19 ISD consumers shall be able to have human readable versions of the entire ISD data set on a browser on the hosting platform provided by Elexon.
- 4.1.20 ISD will be published in CSV format as a full version with a change history detailing changes since the last published version.
- 4.1.21 The ISD shall be published according to the ISD Schedule.
- 4.1.22 The ISDM shall validate the integrity of LLFs and ISD change requests in accordance with BSCCo instructions. If validation fails on the ISD data, it must go back to BSCCo into the ISD Change Process. If validation fails on the LLF data ISD must notify BSCCo.
- 4.1.23 The DUoS Tariff Id and Line Loss Factor Id mapping will be managed in ISD (not registration service).
- 4.1.24 The ISDM shall publish the full ISD data set, on the BSC website in a manner that it is available to the public to access. The data will be available in the 3 separate groupings; (1) Line Loss Factor data, (2) Master Settlement Timetable and (3) ISD data (including UMS data).
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- 4.1.25 The ISDM shall store all ISD Data including Master Settlement Timetable, UMS and LLF Data for 10 years following publication to allow for public access.

4.2 New Agencies

- 4.2.1 The SVAA shall assign an agreed unique reference code to new Supplier Meter Registration Agents, Suppliers, Meter Operator Agents, Data Services, and the SVAA upon being informed of their existence by the BSCCo or its nominated agent. Such unique reference codes shall form part of the ISD and shall be agreed with the BSCCo or its nominated agent prior to their inclusion on an ISD Publish.
- 4.2.2 Where the CDCA has also assigned a unique reference code to any of the market participants referred to in paragraph 4.4.1, this shall also form part of the ISD.

4.3 Maintaining the Industry Standing Data Information

- 4.3.1 The SVAA shall record information about ISD as specified in Appendix 1.
- 4.3.2 The SVAA shall, on request of the BSCCo or its nominated agent, provide the information specified in Appendix 1.

4.4 Production of the SVAA Calendar

- 4.4.1 The SVAA shall produce the SVAA Calendar for incorporation to the Master Settlement Timetable in accordance with BSCP707 and confirm that the dates in the calendar are acceptable. The SVAA Calendar does not (under current arrangements) include the Post Final Settlement Runs (Run Type DF) which are scheduled in the Post Final Settlement Calendar.
- 4.4.2 The SVAA shall send the SVAA Calendar to those recipients defined in BSCP707.

5. OTHER SERVICES

5.1 Audit, Security & Control Requirements

- 5.1.1 The SVAA shall retain an audit trail for each LSS Run, MDS Run each VAR and each issue of ISD for forty (40) months following a Settlement Day, such that it is easily accessible to the BSC Auditor and in a form acceptable to the BSCCo or its nominated agent and the BSC Auditor.
- 5.1.2 The SVAA shall retain audit reports on standing data and changes to standing data and any supporting physical documentation for twenty eight (28) months following a Settlement Day, such that they are easily accessible for use by, and in a form acceptable to, the BSC Auditor and, thereafter, until 40 months after the relevant Settlement Day in a form that may be retrieved, if requested, within 10 Working Days.
- 5.1.3 The SVAA shall support the Extra-Settlement Determination process as agreed with the BSCCo or its nominated agent for a period of 40 months after the relevant Settlement Day.
- 5.1.4 The SVAA shall provide the BSCCo or its nominated agent and the BSC Auditor with access to all systems, data, information, records, procedures and plans related to, and

staff involved in the provision of, the services carried out by the SVAA on behalf of the BSCCo or its nominated agent.

- 5.1.5 The SVAA shall provide a fully itemised list of all the hardware and software (system and application) used in the operation of the SVAA Operations Services within 2 weeks of a request to do so by the BSCCo or its nominated agent.
- 5.1.6 The SVAA shall provide facilities to, and manage access to, and operation rights of, users and operations and support staff, individually or in groups, to view and modify any data received by the SVAA in relation to the SVAA Operations Services.
- 5.1.7 The SVAA shall monitor attempts to breach the security of the SVAA Operations Services and report all such attempts within one Working Day of their occurrence to the BSCCo or its nominated agent and the BSC Auditor.
- 5.1.8 Subject to the prior agreement of the BSCCo or its nominated agent and the BSC Auditor, the SVAA shall arrange for all printed reports which are no longer required for the provision of services, or for audit or the purposes of the BSCCo or its nominated agent, to be securely destroyed (for example, by shredding) and for all the BSCCo's or its nominated agent's data which is no longer required to be obliterated from machine readable media prior to disposal.
- 5.1.9 The SVAA shall ensure the confidentiality and integrity of the information that it receives, processes and maintains.

5.2 Provision of Output Files

- 5.2.1 Extract files from the SVAA System shall be formulated into a predictable output as described in the BSC SVA Data Catalogue. These files shall then be output to the Data Marshalling Process.
- 5.2.2 The SVAA shall use the pre-determined volume parameters and the number of Settlement Day(s) provided by the BSCCo or its nominated agent for the purposes of determining the level of output which is acceptable in determining whether or not a re-send of output files will be undertaken.
- 5.2.3 When a request is received to re-send output files, the SVAA shall ensure that the re-send is submitted to the BSCCo or its nominated agent for consideration, where the request:
 - 5.2.3.1 *exceeds the pre-determined parameters provided to the SVAA; and*
 - 5.2.3.2 *relates to more than three (3) Settlement Days, or an alternative number of Settlement Days as specified by the BSCCo or its nominated agent, in accordance with paragraph 5.2.2 above, of output files.*
- 5.2.4 Where instructed by the BSCCo or its nominated agent to re-send the output files, the SVAA shall re-send the output files.
- 5.2.5 The SVAA shall maintain records of re-sends of output files and, when requested to do so by the BSCCo or its nominated agent, report this information to the BSCCo or its nominated agent.

- 5.2.6 Where instructed by the BSCCo or its nominated agent to provide a quotation for the cost of re-sending output files in accordance with paragraph 5.2.5 above, the SVAA shall provide such a quotation to the BSCCo or its nominated agent in accordance with the timescales and method defined in BSCP703.

5.3 Data Marshalling

- 5.3.1 The SVAA shall route all electronic output files, via the Data Marshalling Process.
- 5.3.2 The SVAA shall use the flow control parameters notified to the SVAA in writing by the BSCCo or its nominated agent. The BSCCo or its nominated agent retains the right to change the flow control parameters at any time and the SVAA will use these flow control parameters as soon as practicable but no later than one Working Day after receipt.
- 5.3.3 The performance of the flow controller element of the Data Marshalling Process shall be reported to the BSCCo or its nominated agent on a periodic basis by the SVAA.
- 5.3.4 The SVAA shall propose revisions to the flow control parameters and submit these to the BSCCo or its nominated agent for agreement, in a format agreed with the BSCCo or its nominated agent.
- 5.3.5 The SVAA shall ensure that the Data Marshalling Process outputs files in the following order of priority:
- 5.3.5.1 *Load Shaping Publications;*
 - 5.3.5.2 *the remaining reports specified in BSCP703.*
- 5.3.6 The BSCCo or its nominated agent retains the right to change the order of priority at any time. Any such changes will be notified to the SVAA, in writing by the BSCCo or its nominated agent. The SVAA will amend the order of priority as soon as practicable but no later than one Working Day after receipt.

5.4 Managed Data Network

- 5.4.1 The SVAA shall manage the Data Marshalling Process so that the data are passed, as soon as possible, to the gateway using the flow control parameters provided by the BSCCo or its nominated agent from time to time.
- 5.4.2 “Successful dispatch” means the receipt of such data at the gateway where the flow controller element of the Data Marshalling Process:
- 5.4.2.1 *holds files; and*
 - 5.4.2.2 *is constrained only by the flow control parameters specified above; and*
 - 5.4.2.3 *is operating in accordance with its agreed functional specification.*
- 5.4.3 The receipt of a complete and correct set of data in the Data Marshalling Process shall be deemed to have achieved “successful despatch”.

5.5 Dispute Handling

- 5.5.1 The SVAA shall provide the Dispute Support Service in order that Market Participants may pursue and verify disputes.
- 5.5.2 When instructed by the BSCCo or its nominated agent, the SVAA shall re-run the LSR and prioritise the despatch of the files as specified in paragraph 5.3.5 above.
- 5.5.3 For up to twenty eight (28) months after any Settlement Day the SVAA shall, on request of the BSCCo or its nominated agent, perform a VAR for such Settlement Day.
- 5.5.4 The SVAA shall (on request) provide the information required by the Market Participant requesting support. This may consist of the data used and the outputs produced on one or more Settlement Days.
- 5.5.5 The SVAA shall ensure that, unless otherwise agreed, Suppliers only receive data relating to their own purchases.
- 5.5.6 The SVAA shall comply with BSCP11.
- 5.5.7 The SVAA shall be able to supply input and output data and software from archive within two Working Days for any Settlement Day up to 28 months after the Settlement Day, in printed and electronic form, to support the reasonable requirements of the BSCCo or its nominated agent.
- 5.5.8 The SVAA shall support the Extra-Settlement Determination process as agreed with the BSCCo or its nominated agent.
- 5.5.9 The SVAA shall provide a copy of ISD for any Settlement Day on request by any authorised party, for audit and dispute purposes for a period of 14 months prior to when the request was made.
- 5.5.10 Where the SVAA is aware of errors within the Settlement system that may give rise to a dispute it shall notify the BSCCo or its nominated agent promptly.
- 5.5.11 The SVAA shall initiate a dispute where there has been a material error in the Settlement process. The BSCCo or its nominated agent shall inform the SVAA, from time to time, of the definition of “material” for the purposes of this paragraph.

5.6 Provision of Performance Monitoring Data

- 5.6.1 The SVAA shall provide the appropriate data to the BSCCo or its nominated agent as specified in BSCP533.
- 5.6.2 The SVAA shall provide the appropriate data to the BSCCo or its nominated agent in the timescales specified in BSCP533.

5.7 Miscellaneous

- 5.7.1 The SVAA shall immediately report to the BSCCo or its nominated agent any known or suspected failures of the hardware or software, any such report to be confirmed in writing.
- 5.7.2 The SVAA shall report to the BSCCo or its nominated agent any significant known or suspected errors in the Settlement process, any such report to be confirmed in writing.

- 5.7.3 The SVAA shall seek and follow the advice of the BSCCo or its nominated agent where the SVAA is uncertain about the correct course of action in exceptional circumstances or in cases of ambiguity in the documentation, provided that seeking advice shall not delay passing reports to the Settlement Administration Agent beyond the timescales in the Funds Administration Agent Calendar.
- 5.7.4 The SVAA shall synchronise the SVA System's time to ensure agreement within one second of Co-ordinated Universal Time.
- 5.7.5 The SVAA shall attach file creation timestamps to incoming files to ensure that the files are loaded in the correct order.
- 5.7.6 The SVAA shall attach file processed timestamps (the time at which the file was processed) to incoming files for audit purposes.
- 5.7.7 The SVAA shall store a date/time defining when the VAS run was undertaken and stored. VAS shall set and store the Run Number.

5.8 SVAA Data Archiving Requirements

- 5.8.1 The SVAA shall obtain relevant DIP messages in order to maintain an accurate representation of Registration Data which can be referenced by LSS and MDS as part of their processing activities. It is possible that these market messages may contain additional information that is not required to be maintained within the SVAA Registration Data archive. It will therefore be necessary for the SVAA to identify the data items which it requires.
- 5.8.2 The SVAA should consider that as a result of the way in which some MHHS processes operate it is possible that for short periods of time (days) that the data items associated with an MSID may not comply with valid ISD combinations whilst the business processes to maintain the data items are ongoing.
- 5.8.3 The SVAA must obtain legacy data item (Profile Class/SSC) updates from Registration Service via the appropriate interface on the DIP and maintain records accordingly.
- 5.8.4 The SVAA should consider how to obtain Industry Standing Data (ISD) update notifications via the appropriate interface, and if required take necessary steps to obtain refreshed ISD data, maintain their records accordingly and reference/ utilise ISD as appropriate as part of the service delivery.
- 5.8.5 The SVAA shall retain data in line with the Non Functional requirements.
- 5.8.6 The SVAA shall obtain Change of Supplier notifications via the appropriate interface on the DIP and maintain a history of Supplier, Supplier Effective From Date, Domestic Premise Indicator and Domestic Premise Indicator Effective From Date for each MSID.
- 5.8.7 The SVAA shall obtain Service Provider Notifications of Appointment via the appropriate interface on the DIP and maintain a history of the Data Service appointed to an MSID with it's Appointment Effective From and To Dates.

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- 5.8.8 The SVAA shall obtain Registration Service Change of Energisation Notifications via the appropriate interface on the DIP and maintain a history of the energisation status for an MSID with it's Effective From Date.
- 5.8.9 The SVAA shall obtain Registration Service CSS De-registration Notifications via the appropriate interface on the DIP and maintain a history of the MSID status for an MSID with it's Effective From Date.
- 5.8.10 The SVAA shall obtain Change of Supplier notifications via the appropriate interface on the DIP and, in instances of MSID initial registration, create a new MSID entity and populate additional data as required from the message so as to set up an initial starting position for the MSID.
- 5.8.11 The SVAA shall obtain Notifications of Connection Type via the appropriate interface on the DIP and maintain a history of the Connection Type for an MSID with it's Effective From Date.
- 5.8.12 The SVAA shall obtain Notifications of Change in Market Segment via the appropriate interface on the DIP and maintain a history of the Market Segment for an MSID with it's Effective From Date.
- 5.8.13 The SVAA shall obtain Notifications of Registration Data Item Changes via the appropriate interface on the DIP and maintain a history of the GSP for an MSID with it's Effective From Date.
- 5.8.14 The SVAA shall obtain Notifications of Registration Data Item Changes via the appropriate interface on the DIP and maintain a history of the Domestic Premise Indicator for an MSID with it's Effective From Date.
- 5.8.15 The SVAA shall obtain Notifications of Registration Data Item Changes via the appropriate interface on the DIP and maintain a history of the DUoS Tariff ID for an MSID with it's Effective From Date.
- 5.8.16 The SVAA shall obtain Notifications of Registration Data Item Changes via the appropriate interface on the DIP and maintain a history of the Energy Direction for an MSID with it's Effective From Date.
- 5.8.17 The SVAA must obtain Notifications of Registration Data Item Changes via the appropriate interface on the DIP and maintain a history of the Metered/Unmetered Indicator for an MSID with it's Effective From Date.
- 5.8.18 The SVAA must obtain legacy data item (Profile Class/SSC) updates from Registration Service via the appropriate interface on the DIP and maintain records accordingly.
- 5.8.19 The SVAA must obtain UTC Settlement Period Consumption Data via the appropriate interface on the DIP, validate and process as required.
- 5.8.20 The SVAA must publish Notifications of Load Shape Period Data via the appropriate interface on the DIP.
- 5.8.21 The SVAA must publish Notifications of Load Shape Totals Data via the appropriate interface on the DIP.
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5.8.22 The SVAA shall ensure the VAS and MDS store all output Data for a period of 40 months.

5.8.235 The SVAA shall keep a log of all data files sent and received for 40 months.

6. SERVICE AVAILABILITY

- 6.1 The SVAA shall ensure the Services described in this Service Description shall be carried out for each Settlement Day according to the Master Settlement Timetable, and be available throughout the Working Day.
- 6.2 The SVAA shall ensure the SVA System is capable of being operational for 24 hours per day, less the time reasonably required for planned daily back-up.
- 6.3 The SVAA shall ensure the LSS and MDS availability of 99.95% outside planned outage periods (those components that physically interface with the DIP).
- 6.4 The SVAA shall, as required by the BSCCo or its nominated agent, provide the Service for additional VARs other than those required to meet the Master Settlement Timetable, on a timescale to be agreed with the BSCCo or its nominated agent.
- 6.5 Where required by the BSCCo or its nominated agent, and given five Working Days' notice, the SVAA shall provide the Service 24 hours per day, less the time reasonably required for planned daily back-up.

In relation to ISD, the SVAA shall ensure that:

- 6.4.4.1 *the ISDM Normal Working Hours are defined as 08:30 to 17:00 on Working Days; and*
- 6.4.2 *it meets its obligations under this Service Description, regardless of any potential constraints which might be imposed by the definition of ISDM Normal Working Hours.*

7. SVA METERING SYSTEM AND ASSET METERING SYSTEM REGISTER

- 7.1 The SVAA shall be responsible for the creation and maintenance of the SVA Metering System and Asset Metering System Register. The SVA Metering System and Asset Metering System Register is a register of SVA Metering System Numbers, Asset Metering System Numbers and the Secondary and / or Additional BM Unit to which they have been allocated for the purposes of providing BM or Replacement Reserve Services.
- 7.1 A The SVA Metering System and Asset Metering System Register shall also contain SVA Metering System Numbers provided by the NETSO for the purposes of providing Non BM ABSVD. Such SVA Metering System Numbers will not be associated with a BM Unit.
- 7.2 MSID Pair Allocation data will be provided to the SVAA by Suppliers, AMVLPs, VLPs and the NETSO as defined in the SVA Data Catalogue. If the file received cannot be processed the SVAA shall send a notification informing the sender.
- 7.2A AMSID Pair Allocation data will be provided to the SVAA by AMVLPs, as defined in the SVA Data Catalogue, and will identify all associated MSID Pairs and whether the AMSID Pair(s) Delivered Volumes should be used instead of MSID Pair(s) Delivered Volumes or should be used for Asset Differencing.

- 7.3 The SVAA will validate the MSID Pair Allocation data it receives prior to recording that data on the SVA Metering System and Asset Metering System Register. The SVAA shall use data held in the Electricity Enquiry Service (EES) database to facilitate such validation, either using an Automated Programmable Interface (API) or by manual inspection.
- 7.4 Where a MSID Pair submitted by a Supplier, an AMVLP or a VLP, or an AMSID Pair submitted by an AMVLP, is already allocated to a BM Unit that offers Balancing Services, the SVAA shall, subject to validation, confirm the most recent allocation and notify the previous SVA Metering System and Asset Metering System Register registrant of such loss.
- 7.5 The SVAA shall provide functionality to allow a Supplier, AMVLP, VLP or the NETSO to retrospectively correct a MSID Pair Allocation error or, in the case of an AMVLP, an AMSID Pair Allocation error, and that where correction of the identified error ensures that the future accuracy of Settlement.
7. 5A The SVAA shall provide functionality to allow a Supplier, an AMVLP or a VLP to Baseline MSID Pairs - and to allow an AMVLP to Baseline AMSID Pairs – in BM Units (Additional BM Units for Suppliers and Secondary BM Units for AMVLPs and VLPs).
7. 5B The SVAA shall provide functionality to allow a Supplier, an AMVLP or a VLP to submit:
- i) Baselining Details and Event Days for Baselined BM Units; and
 - ii) Submitted Expected Volumes for Baselined BM Units with AMSID Pairs or MSID Pairs allocated with Baseline Indicator "Submitted".
- 7.6 When the SVAA validates and confirms a MSID Pair Allocation it shall procure and record MSID Standing Data by either manual enquiry of SMRS data or another source as agreed by the BSC Panel.
- 7.7 The SVAA will further validate MSID Pair Notifications against MSID Standing Data procured from the relevant SMRS. MSID Pair data will be validated to ensure that the data is compliant with MSID Pair specifications.
- 7.7A The SVAA shall not be required to perform the actions set out in paragraphs 7.1.6 and 7.1.7 for AMSID Pair Allocations, as AMSIDs will not be recorded in SMRS.
7. 8 The SVAA shall provide functionality to facilitate the resolution of Disputed MSID Pair Allocations and Disputed AMSID Pair Allocations.
7. 9 For each SVA Metering System Number in the SVA Metering System and Asset Metering System Register, the SVAA shall request that the MDS submits Metering System Half Hourly Metered Data for the period that the related MSID Pair is effective.
- When a MSID Pair becomes baselined, the SVAA shall also request for each MSID in a Baselined MSID Pair that the HHDA provide historic Metering System Half Hourly Metered Data for the 60 days prior to the Baselining Effective From Date.

7. 9A For each Asset Metering System Number in the SVA Metering System and Asset Metering System Register, the SVAA shall not be required to request that the appointed HHDC submits Asset Metering System Half Hourly Metered Data for the period that the related AMSID Pair is effective. Instead, each HHDC shall submit Asset Metering System Half Hourly Metered Data to the SVAA for each Asset Metering System Number for which it has been appointed by an AMVLP in accordance with the dates specified in the relevant contract.
7. 10 SVAA shall ensure that the allocation data contained with the SVA Metering System and Asset Metering System Register is available for each Settlement Run for each Settlement day.

7A. REGISTRATION OF ASSET METERING SYSTEMS

- 7A.1 SVAA shall validate Asset Metering Systems registration data submitted to the SVA Metering System and Asset Metering System Register by an AMVLP in three stages, in accordance with BSCP602:
- 7A.1.1 Stage 1 Asset Registration;
- 7A.1.2 Stage 2 Asset Metering Party Agent Registration; and
- 7A.1.3 Stage 3 Asset Meter Registration.
- 7A.2 If the Asset Metering Systems registration data for a registration stage submitted under 7A.1 fails validation, the SVAA shall issue a Rejection Notification to the AMVLP and shall not process any registration data for a subsequent registration stage submitted by the AMVLP in respect of that Asset Metering System until such time that the AVLP has corrected all errors in the previously rejected Registration Stage data.
- 7A.3 If the Asset Metering Systems registration data for a registration stage submitted under 7A.1 passes validation, the SVAA shall issue a Confirmation Notification to the AMVLP and shall process the registration data for the subsequent registration stage when received from the AMVLP.
- 7A.4 If the Asset Metering Systems Stage 1 Registration data passes validation, the SVAA shall generate an AMSID Pair and include details of such AMSID Pair in the Confirmation Notification to the AMVLP.
- 7A.5 The SVAA shall not process any AMSID Pair Allocations received pursuant to paragraph 7.1.3 until such time that all three Asset Metering System Registration Stages have passed validation.
- 7A.6 The SVAA shall ensure that any Asset Registration Stage data that has passed validation shall be stored in the SVA Metering System and Asset Metering System Register.

7B. AMSID PAIRS

- 7B.1 An AMSID Pair shall comprise an Import AMSID and, where so required, an Export AMSID.

7B.2 Each Asset Metering System Number, which is also referred to as ‘Asset Metering System Number’, shall be an unique 13-digit number, which shall comprise:

- Digits 1-2 – shall always be “77”;
- Digits 3-12 – shall be an unique 10-digit number; and
- Digit 13 – shall be generated from digits 1-12 using a checksum algorithm.

8. APPENDICES

8.1 Appendix 1 - Details of Information Maintained

The following minimum information shall be retained by the SVAA. This information may be held in various forms, such as database records, problem management logs, exceptions reports or manual records, and will be extracted and made available to the BSCCo or its nominated agent on request. The SVAA shall ensure that it also maintains records of any additional information required to fulfil its obligations under this Service Description or any other contractual obligation.

Type of Information	Minimum Requirements
Industry Standing Data Details (for each Industry Standing Data load into BSC Central Systems)	ISD Version number Date and Time loaded into ISRA Details of any validation errors including: Nature of Error When BSCCo or its nominated agent informed Whether BSCCo informed within BSCP timescale Details of Action Taken
Invalid UTC Period Consumption Data from a Data Service	IF/PUB-014 Rejected - UTC Settlement Period Consumption Data
Defaulted data (where data is missing) or actual UTC Settlement Period Consumption Data has been provided from a Data Service where the MSID is De-energised	IF/PUB-013 Notification of Defaulted UTC Settlement Period Consumption Data

Type of Information	Minimum Requirements
Supplier, AMVLP or VLP Details (for each file received from a Supplier, AMVLP or VLP)	MPID of Supplier AMVLP or VLP Settlement Date Secondary BM Unit Id MSID Pair EFD MSID Pair ETD Import MSID Import MSID Customer Consent EFD Import MSID Customer Consent ETD Export MSID Export MSID Customer Consent EFD Export MSID Customer Consent ETD AMSID Pair EFD* AMSID Pair ETD* Import AMSID * Export AMSID* Date and Time of Receipt Date and time validated Whether validated within BSCP timescale Details of any Validation errors including: Nature of Error When notification of validation error sent Whether sent within BSCP timescale Volume Allocation Runs file used in * AMVLPs only

Type of Information	Minimum Requirements
NETSO Details (for each file received from the NETSO)	Settlement Date MSID Pair EFD MSID Pair ETD Import MSID Import MSID Customer Consent EFD Import MSID Customer Consent ETD Export MSID Export MSID Customer Consent EFD Export MSID Customer Consent ETD Date and Time of Receipt Date and time validated Whether validated within BSCP timescale Details of any Validation errors including: Nature of Error When notification of validation error sent Whether sent within BSCP timescale Volume Allocation Runs file used in

Type of Information	Minimum Requirements
Activations Data (for each file received from SAA)	Settlement Date BM Unit Id (Primary and Secondary) Settlement Period Balancing Mechanism activations Replacement Reserve activations for each Quarter Hour
GSP Group Take Details (for each file received from the CDCA)	Run Number of File Settlement Date Run Type Date and Time of Receipt Deadline If received after deadline: When the BSCCo or its nominated agent informed Whether within BSCP timescale Details of action taken Details of any validation errors, including: Nature of error When notification of validation error sent Whether sent within BSCP timescale Medium by which sent Address where sent (network, fax no, physical, etc.)

Name of Information	Minimum Requirements
Line Loss Factor Details (for each file received from BSCCo or its nominated agent)	Date and time file created Date and time of receipt Details of any validation errors, including: Nature of Error When the BSCCo or its nominated agent informed Whether informed within BSCP timescale Details of Action Taken

Type of Information	Minimum Requirements
MDS Run Details (for every MDS Run)	Settlement Date Settlement Code Time and date Input parameters used Details of any warning or error condition, including: Details of condition Details of action taken
Volume Allocation Run Details (for every VAR)	Settlement Date Settlement Code Time and date Input parameters used Details of any warning or error condition, including: Details of condition Details of action taken
Missing Input Data Details (for every MDS Run or VAR) =	Settlement Date Settlement Code Type of data missing Originator of missing data: When Contacted By which medium Whether within BSCP timescale Details of Correspondence Details of substituted data

Type of Information	Minimum Requirements
Output Report Details (for every MDS Run or VAR)	Type of report To whom sent Settlement Date Settlement Code Time and date sent Sent within BSCP timescales Medium by which sent Address If late or missing: Time and date the SVAA first realised the report would not meet the deadline Time and date recipient contacted Contact's name / area Medium by which contacted
Output Report Details (for every MDS Run or VAR)	Details of report requested, including: File type Settlement Date Run type MPID of original recipient MPID of requestor When requested Whether authorisation correct If authorisation not correct: Date and time of contacting authorised Party Medium by which contacted Whether within BSCP timescale Details of response Whether update accepted as authorised Date and time file re-sent Whether re-sent within four Working Hours

Type of Information	Minimum Requirements
Receiving Updates (for every Industry Standing Data update received)	Version Number of Update Date and Time received Medium by which received Intended ISD Publication Date Date and Time of Validation Whether validated within timescales agreed with the BSCCo or its nominated agent Details of any validation errors including: Nature of Error Date and Time of Contacting BSCCo Whether contacted within BSCP timescales If not contacted within BSCP timescales, the number of days late
Problems with ISD (for every problem reported from the BSC Service Desk)	Date and Time of receipt of query from BSC Service Desk Nature of query Date & Time of Contacting BSCCo or its nominated agent Whether BSCCo contacted within BSCP timescale Date and time of contacting BSCCo Within BSCP timescale (Y/N)
Publishing Data (for every Industry Standing Data Publish)	ISD Version Number Time and date sent If not published within timescales specified in the ISD Change Management Circular, number of days late.
Load Shape Production Data	IF-022 / PUB-022 'Load Shape Period Data' and the IF-023 / PUB-023 'Load Shape Totals Data'

Name of Information	Minimum Requirements
SVA Metering System and Asset Metering System Register Details	Date and time of receipt of MSID Pair Allocation or AMSID Pair Allocation Details of any validation errors, including: - Nature of Error - When the Lead Party was informed - Whether informed within BSCP timescale Details of any successful validation, including: - When the Lead Party or the NETSO was informed - Whether informed within BSCP timescale Details of any Disputed MSID Pair Allocations, including: - Nature of dispute - When the Current Lead Party was informed - When the Current Lead Party replied - Whether Parties are within BSCP timescale

Name of Information	Minimum Requirements
Non-Final Demand Facility Declaration	Source of Declaration, including: - Supplier Contact E-mail Address - Supplier MPID Declaration information, including: - Declaration Type - Declaration Set ID - Declaration ID - Declaration effective dates Facility Operator (FO) details, including: - FO Participant ID - FO Company Number - FO Company Name - FO Company Address - FO Company Director - FO Company Director E-mail Address - FO Contact Name - FO Contact Phone - FO Contact e-mail - Facility Category Facility details, including: - Facility ID - Facility Name - Facility Address/Location - Facility Description - Facility Maximum Import Capacity - Facility Maximum Export Capacity - Facility Effective From Date - Facility Effective To Date - Total MSIDs Count Metering System (MS) details, including: - MSID - MS Import/Export Indicator - MS GSP Group - MS SF Effective From Date - MS SF Effective To Date

Name of Information	Minimum Requirements
	MS Supplier Effective From Date MS HHDA MPID MS HHDA Effective From Date

8.2 Appendix 2 – Master Settlement Timetable and SVAA Calendar

8.2.1 The Master Settlement Timetable will be published as part of ISD. It will constructed from the data from in the FAA the SVAA, SAA Calendars will contain for each VAR. The SVAA shall provide the data in bold below in the SVAA Calendar:

- **Settlement Date**
- **Day Type Id**
- **Settlement Code**
- **LSS Run Date**
- **CDCA Run Date**
- **MDS Run Date**
- **VAS Run Date (VAR date)**
- **SAA Run Date**
- **Notification Date**
- **Payment Date**