ELEXON

P402 Targeted Charging Review (SCR)

v2.0 - 04/03/2021

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Version History

Date	Version	Author	Description
19/01/2021	V1.0	Elexon	Approved Business Requirements
04/03/2021	V2.0	Elexon	Final Demand Site definition corrected to align with Legal Text.

Business Requirements - P402 Original

Introduction

Purpose

The BSC Change Business Requirements document is produced as part of the 'End to End BSC Change Process' during the BSC Change Assessment process. The purpose of this document is to communicate the Business Requirements of BSC Change P402 to industry members and service providers.

It enables impact assessments to be carried out by Service Providers and Industry.
In addition it describes the anticipated impact on BSCCo (people, processes and systems), the BSC, Code Subsidiary Documents, Configurable Items and other Parties..

BSC Change Summary

P402 Problem Statement

The Problem of the method of recovering residual charges from Parties for using the Transmission System will change as a result of the Targeted Charging Review.

Affects the way NETSO calculates Transmission Network Use of System (TNUoS) charges, specifically Tariff Setting and Billing. They need to set and forecast tariffs and bill Parties to recover residual TNUoS charges as set out in the Targeted Charging Review conclusions.

The impact of which is NETSO does not have the required datasets to do this, and existing Settlement data and BSC reports will not provide the data necessary to support proposed TNUoS charging arrangements, in particular to set tariffs and bill. The required data is held by LDSOs.

A successful solution enable NETSO to obtain the required tariff setting and forecasting data as well as Billing data sets across all LDSOs to enable NETSO to charge Parties correctly.

Objectives and Scope

The objective of P402 'Enabling reform of residual network charging as directed by the Targeted Charging Review' is to enable NETSO to obtain the required datasets so that it can recover residual TNUoS charges from Parties in accordance with the new arrangements. The datasets P402 intends to provide NETSO relate to:

- Tariff setting and forecasting; and
- Billing.

The scope of this change includes:

1. Provision of three types of data to NETSO

a Monthly Billing data

LDSOs will provide Half Hourly Billing data for each Distributor ID to SVAA, SVAA will extract NHH Billing data from existing Settlement datasets and consolidate both HH and NHH datasets across all LDSOs and provide this to NETSO

b Annual Tariff Setting data

LDSOs will provide Half Hourly Tariff Setting data for each Distributor ID to SVAA, SVAA will extract NHH Tariff data from existing Settlement datasets and consolidate both HH and NHH datasets across all LDSOs and provide this to NETSO

c UMS data

SVAA will extract HH and NHH UMS data from existing Settlement datasets and provide to NETSO. This will continue to be provided daily via the P0210 data flow which will be amended to include a breakdown of HH and NHH UMS data.

2. Basic validation and exception handling by BSCCo

3. Provision of LLFC to Residual Charging Band and pseudo CVA LLFC : pseudo MPID : CVA MSID mapping tables by LDSOs, CVA MSID to BM Unit mapping table by BSCCo and publication by BSCCo/SVAA as part of MDD

4. Aggregation of Billing, Tariff setting and UMS data using the mapping by SVAA

Terms used

Definitions of the following data items are set out in the Distribution Connection and Use of System Agreement (DCUSA) Schedule 32:

1. Single Site
2. Final Demand Site
3. Non-Final Demand Site
4. Charging Band

The following exclusion applies: Final Demand Sites exclude those Sites for users who own or operate a Distribution System.

For the purposes of the BSC, the data items will be interpreted as follows, in addition to the DCUSA definition:

Single Site = A Single Site is as defined in the DCUSA and a count of Single Sites is achieved by counting Lead MSIDs only. A Single Site can be a Final Demand Site or a Non-Final Demand Site.

Charging Band = A Charging Band is as defined in the DCUSA, it represents a group of Single Sites and determines how they should be treated under the DCUSA's residual charging arrangements. Each Charging Band is represented by an LLFC or group of LLFCs. LDSOs provide details of the relationship between LLFCs and Charging Bands and may also provide additional charging band categories for LLFCs, which are used to group together Non-Final Demand Sites.

Final Demand Site = In addition to the meaning defined in the DCUSA, for the purposes of the BSC a Final Demand Site is a Single Site with a Lead MSID whose LLFC is mapped to a chargeable Charging Band, which is a Charging Band as specified in the DCUSA's residual charging arrangements.

Non-Final Demand Site = In addition to the meaning defined in the DCUSA, for the purposes of the BSC a non-Final Demand Site is a Single Site with a Lead MSID whose LLFC is mapped to an additional charging band category not specified in the DCUSA's residual charging arrangements, and is defined by the LDSO. It is therefore non chargeable.

Lead MSID = where a Single Site has its Imports measured by more than one MSID, in accordance with existing DUOS arrangements the LDSO determines that one of these MSIDs is the Lead MSID. All other MSIDs at the site are additional MSIDs.

Half Hourly Lead MSIDs are associated with Measurement Classes C and E, or a CVA Metering System.
Non Half Hourly Lead MSIDs are associated with Measurement Classes A, F and G, for the purposes of this Modification.

LDSOs will report Single Site counts which is the same as reporting Lead MSID counts. The scope of site counts will not include de-energised sites.

Note that LDSOs maintain relationships between a Single site and its MSID(s). Typically there is a 1:1 relationship between a Site and MSID. However, where a Site has more than one MSID then the LDSO determines a Lead MSID and an additional MSID. For NHH MSIDs, Lead and additional MSIDs have distinct LLFCs. HH Lead and additional MSIDs typically share the same LLFC. It is only Lead MSIDs that are used to derive a site count for Billing Data but both Lead and additional MSIDs' Imports should be added together to determine Final Demand for use in reporting Tariff Setting Data.

Registrant = Registrant of the MSID as defined in the BSC.

Registrant ID = The Registrant ID is either the Supplier ID or as provided by the LDSOs relevant to CVA Registrants. LDSO determined Registrant IDs are based on their internal systems and will be reflected in the relevant mapping tables, the Registrant ID for CVA sites will be contain **four numerical characters**, in contrast to ordinary MPIDs which are four letters long. BSCCo will then determine the Registrant ID from CRA and CMRS records for reporting to NETSO.

BM Unit = as defined in the BSC

GSP Group = as defined in the BSC

Architecture Fit

This BSC Modification would represent a new business capability, to receive a set of data direct from Distributors and provide a consolidated data set to NETSO . It may make use of existing capabilities such as MDD management but the activity is largely new.

References

Document	Author	Date
P402 Initial Written Assessment	Elexon	5 March 2020
P402 Assessment Procedure Consultation	Elexon	7 October 2020
P402 Second Assessment Procedure Consultation	Elexon	15 December 2020

Current State

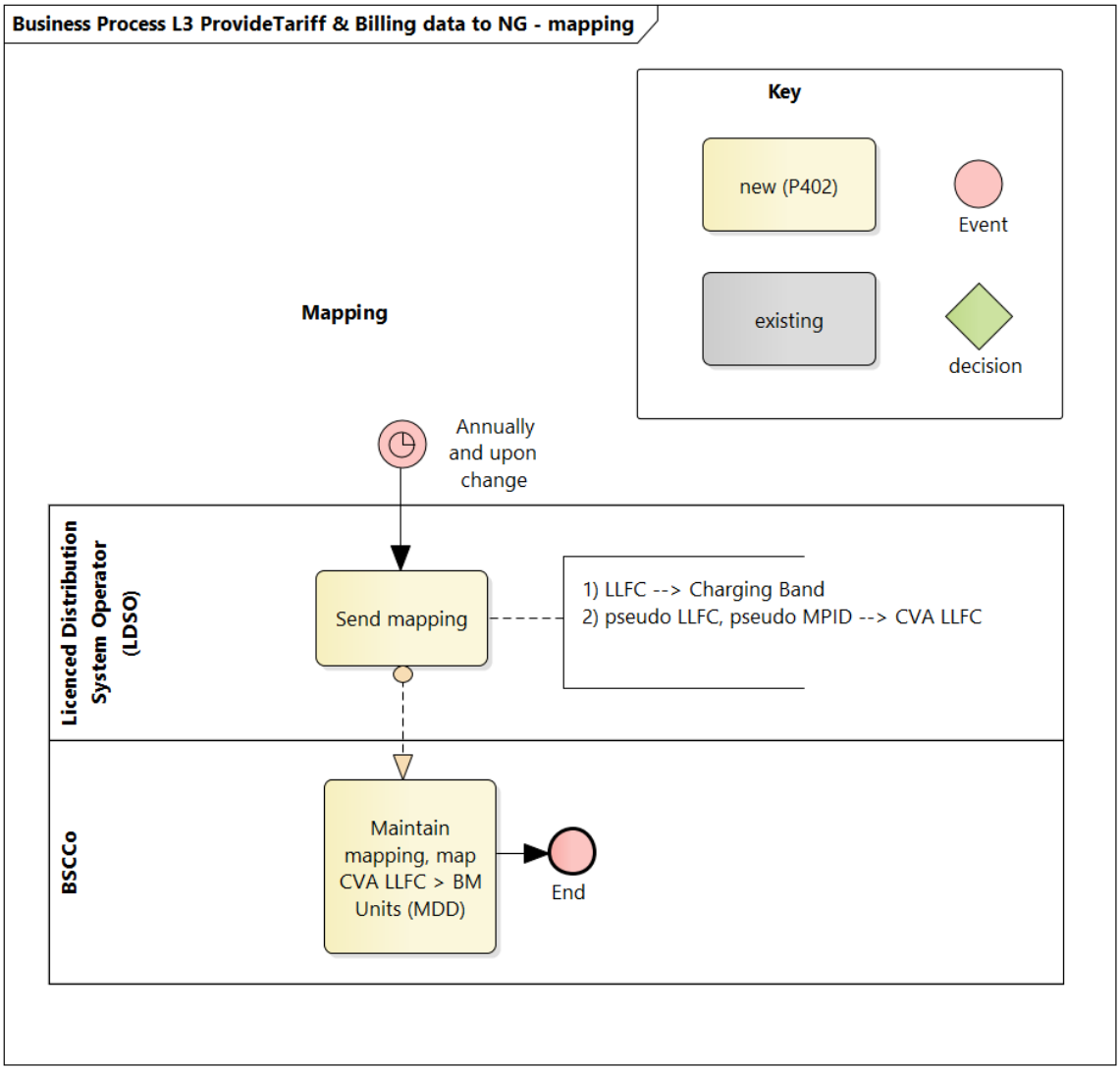
Currently, BSCCo only provides the P0210 'TUoS Report' and the SAA-I014 to NETSO for the purposes of calculating TNUoS charges. These data flows provide aggregated metered volume data, but does not provide site counts.

Future State - Interim Solution

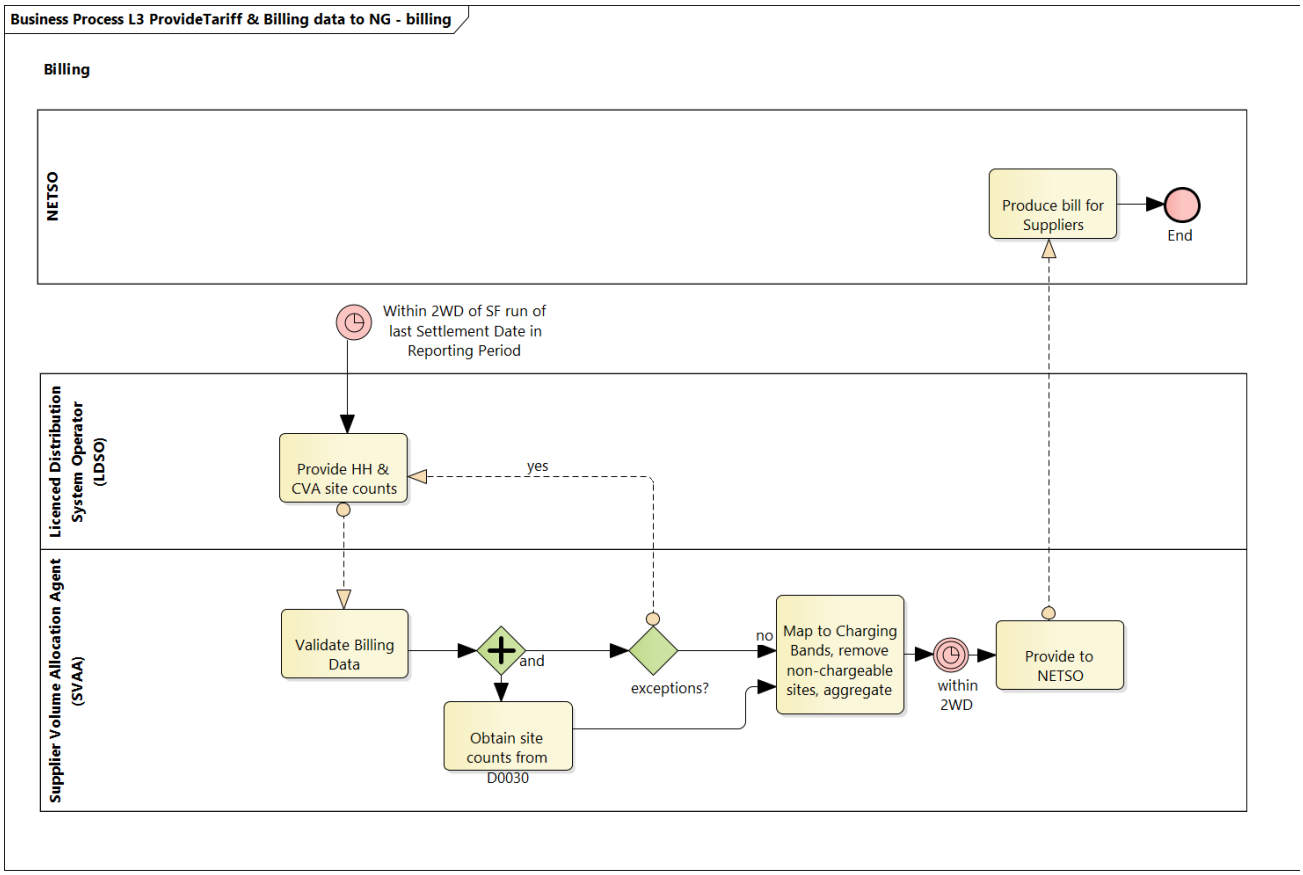
BSC Central Systems are not likely be available immediately following implementation (Feb 2022) as the lead time for systems implementation is 12 months from approval. During this interim period between BSC Code go-live and systems go-live, LDSOs and NGESO will bilaterally agree an approach for the provision of monthly Billing and UMS data, as well as the Tariff Setting data for October 2022.

Future State

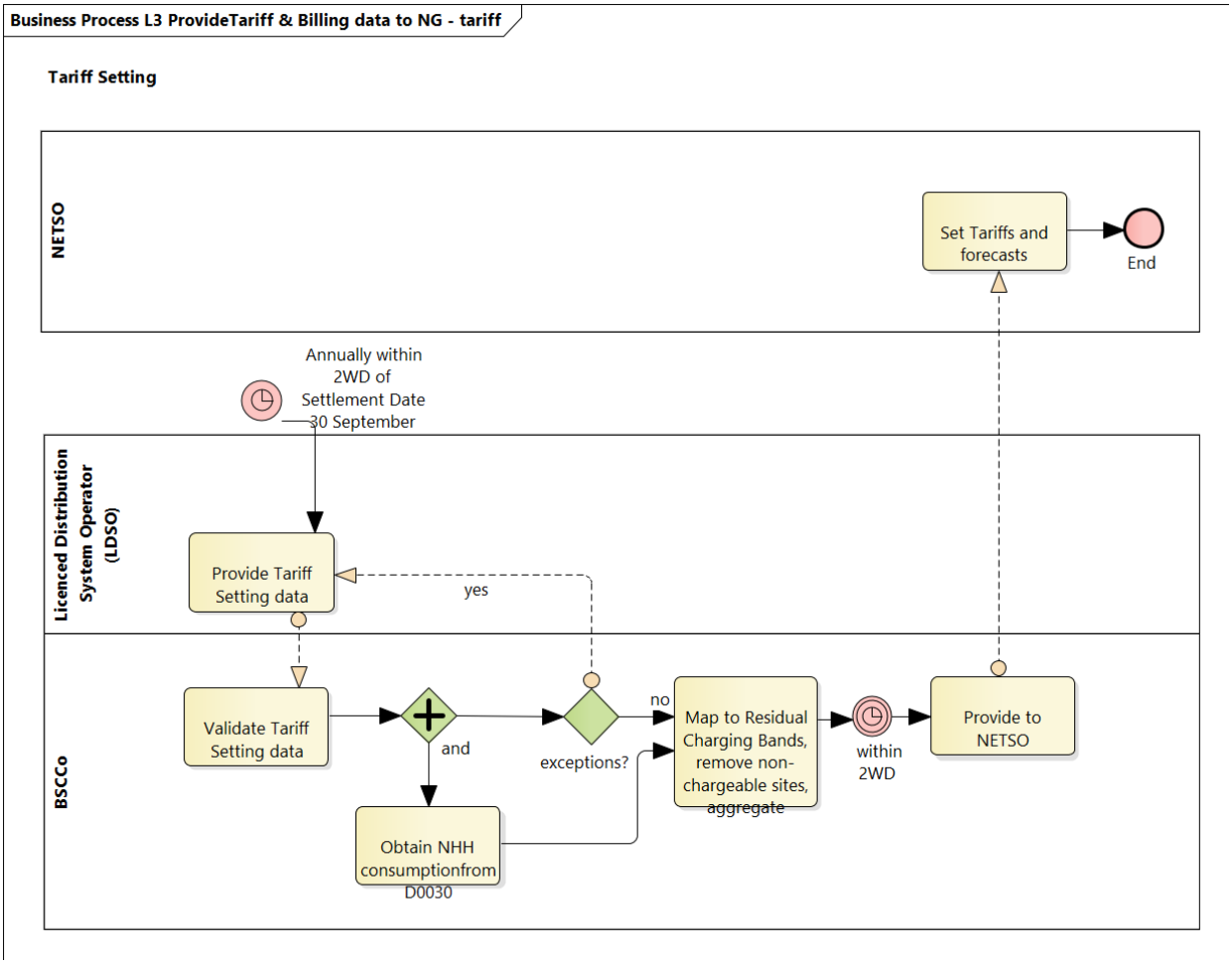
Mapping



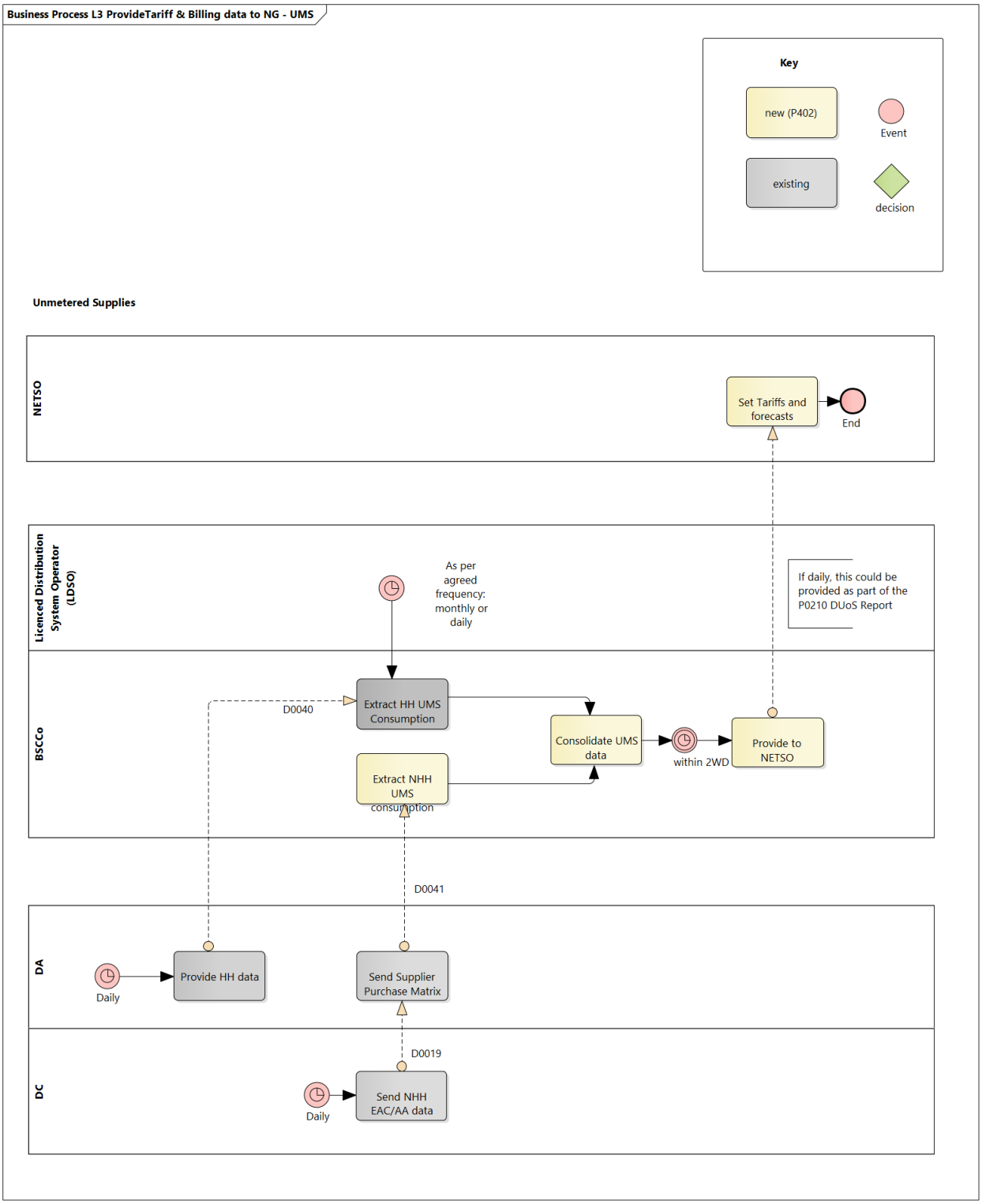
Billing


Business Process L3 ProvideTariff & Billing data to NG - billing
Billing
NETSO
Produce bill for Suppliers
End
Within 2WD of SF run of last Settlement Date in Reporting Period
Licenced Distribution System Operator (LDSO)
Provide HH & CVA site counts
yes
Supplier Volume Allocation Agent (SVAA)
Validate Billing Data
and
exceptions?
no
Map to Charging Bands, remove non-chargeable sites, aggregate
within 2WD
Provide to NETSO
Obtain site counts from D0030

Tariff Setting



UMS



Expected volumetrics

The following volumetrics indicate the amount of input data received by BSCCo (SVAA) from LDSOs.

Distributor IDs = 29
LLFCs = today (16,000 in total divided by 19 Distributor IDs = 850 per Distributor ID) rising to approximately (35,000 in total divided by 19 Distributor IDs = 1850 per Distributor ID)

Charging bands = minimum 18
Registrants = 130 + 24 (approximately 130 SVA Registrants and approximately 24 CVA Registrants, both Final and Non Final Demand single sites)
Frequency of reports = Billing (monthly per Distributor ID), Tariff Setting (annually per Distributor ID)
Settlement Runs = 5
Settlement Dates = number of days in a month

Number of GSP Groups = 14

Approximate maximum number of data items per file (i.e. per Distributor ID reporting on 1 GSP Group):

Today
= 31 Settlement Dates x approximately 154 Registrants x 5 Settlement Run types x 850 LLFCs

This may not necessarily equate to the number of records in a file per Distributor ID, depending on how the file is structured. Additionally, some LDSOs may operate in all 14 GSP Groups (e.g. Independent Distribution Network Operators), and therefore would provide the above data for each GSP Group. Our understanding is that is not a common occurrence.

Future (as a result of further Targeted Charging Review Modifications)
= 31 Settlement Dates x approximately 154 Registrants x 5 Settlement Run types x 1850 LLFCs

This may not necessarily equate to the number of records in a file per Distributor ID, depending on how the file is structured. Additionally, some LDSOs may operate in all 14 GSP Groups (e.g. Independent Distribution Network Operators), and therefore would provide the above data for each GSP Group. Our understanding is that is not a common occurrence.

Business Requirements

Business Requirements

Data Inputs

P402-BR-5 LDSOs provide monthly HH Billing data (current Reporting Period)

Requirement

Within [**3**] WD of the Initial Volume Allocation Run (type=SF) for the last Settlement Day of the latest Reporting Period, each Licensed Distribution System Operator (LDSO) must provide Billing Data to SVAA for Single Sites whose Imports are measured by HH Lead Metering Systems registered in SMRS or CMRS. This includes both Final Demand and Non-Final Demand Single Sites.

Billing data is the count of Single Sites on each Settlement Day of a Reporting Period for each Registrant of the Lead MSIDs measuring Imports to the Single Sites, reported by Line Loss Factor Class (LLFC), GSP Group and Settlement Run Type, relating to each Distributor ID.

The Reporting Period for Billing data is a calendar month, e.g. for the Reporting Period of 1-30 April, each LDSO will provide Billing data within 2WD of the SF run for 30 April, which will be in May.

Where an LDSO has more than one Distributor ID (MPID), then the LDSO must report Billing data for each Distributor ID.

LDSO will exclude Metering Systems whose Imports are measured by measurement classes 'F' and 'G' from their Billing and Tariff Setting data. These will be treated as though they are NHH MSIDs and so will be included in the determination of NHH Billing and Tariff Setting Data.

If an LDSO does not receive SF Settlement Data within [**3**] WD of the Initial Volume Allocation Run (type=SF) for the last Settlement Day of the latest Reporting Period, then it does not need to report in accordance with this requirement for the calendar month for which Settlement Data was not received. This does not absolve the LDSO of its responsibility under P402-BR-32.

Proposed Fields for the provision of Billing data to BSCCo (SVAA) by LDSOs

Distributor Id (MPID)	Line Loss Factor Class (LLFC)	GSP Group	Registrant ID*	Settlement Day (DD/MM/YYYY)	Settlement Run Type	Count of Single Sites	Reporting Period (MMM-YY)
EMEB		_B	SOUT	01/03/2021	SF		Jul-2020
EMEB		_B	MIDE	01/03/2021	SF		Aug-2020

*The Registrant ID is either the Supplier ID or as provided by the LDSOs relevant to CVA Registrants. LDSO determined Registrant IDs are based on their internal systems and will be reflected in the relevant mapping table, the Registrant ID for CVA sites will be contain four numerical characters, in contrast to ordinary MPIDs which are four letters long)

Priority: Must Have

P402-BR-32 LDSOs provide updated HH Billing data (earlier Reporting Periods)
Requirement

Within [**3**] WD of the Initial Volume Allocation Run (type=SF) for the last Settlement Day of each Reporting Period, each LDSO must provide **updated** Billing Data for earlier Reporting Periods to SVAA for Single Sites whose Imports are measured by HH Lead Metering Systems registered in SMRS or CMRS. This includes both Final Demand and Non-Final Demand Single Sites.

LDSO will exclude Metering Systems whose Imports are measured by measurement classes 'F' and 'G' from their Billing and Tariff Setting data. These will be treated as though they are NHH MSIDs and so will be included in the determination of NHH Billing and Tariff Setting Data.

Earlier Reporting Periods

Where SVAA performs a Reconciliation Volume Allocation Run for the last day of an earlier Reporting Period on or before the Initial Volume Allocation Run of the last day of the most recent Reporting Period is completed, and after the Initial Volume Allocation Run of the previous Reporting Period, the LDSO must also resend Billing Data for that earlier Reporting Period to SVAA.

The process to achieve the above is as follows:

LDSO looks on SVAA Settlement Calendar to identify the date of the Initial Volume Allocation Run for the last day of the previous Reporting Period.

LDSO looks on SVAA Settlement Calendar to identify the date of the Initial Volume Allocation Run for last day of the most recent Reporting Period.

If, according to the SVAA Settlement Calendar, any Reconciliation Volume Allocation Runs have been carried out for the last day of an earlier Reporting Period, in between the above Initial Volume Allocation Run dates, LDSOs must provide updated Billing Data for that earlier Reporting Period including the Settlement Run Type.

See example below.

Proposed Fields for the provision of Billing data to BSCCo (SVAA) by LDSOs

Distributor Id (MPID)	Line Loss Factor Class (LLFC)	GSP Group	Registrant ID	Settlement Day	Settlement Run Type	Count of Single Sites	Reporting Period
EMEB		_B	SOUT	01/03/2021	SF		
EMEB		_B	MIDE	01/03/2021	SF		

Example of Billing Data relating to earlier Reporting Periods

Reconciliation Volume Allocation Runs

The SVAA Settlement Calendar specifies when Settlement Runs take place - ordinarily these Settlement Runs trigger Settlement processes necessary to calculate trading charges. Typically the timetable is as follows:

- the initial Volume Allocation Run (SF) is run 15WD after the Settlement Day
- the 1st Reconciliation (R1) takes place approximately 39WD after the Settlement Day (between 36 and 40 WD)
- the 2nd Reconciliation (R2) takes place approximately 84WD after the Settlement Day (between 81 and 85 WD)
- the 3rd Reconciliation (R3) takes place approximately 154WD after the Settlement Day (between 151 and 155 WD)
- the Final Settlement Run takes place approximately 292WD after the Settlement Day (between 289 and 293 WD)

A Reporting Period is defined as a calendar month, e.g. for the Reporting Period of 1-30 April, each LDSO will provide Billing data within 2WD of the SF run for 30 April, which will be approximately 16WD later, in May. Therefore the Billing Data the LDSO reports to SVAA each month will include Billing Data for the most recent Reporting Period **and may also** include Billing Data for earlier Reporting Periods where subsequent Reconciliation Runs have completed.

For example, the March 2019 Billing Report will be provided 2WD after the SF Run date for 28 Feb 2019. The SF Run date for 28 Feb 2019 takes place approximately 16WD from 28 Feb 2019, which is 21 March 2019. By 21 March 2019, the second Reconciliation Run for the Settlement Day of 31 Oct 2018 [last date of the Oct 2018 Reporting Period] is also available, i.e. Billing Data from an earlier Reporting Period.

Further examples are shown below.

On the 21/02/2019 (VAR Date column), SF data for 31 Jan 2019 (January Reporting Period) is available. The Billing report for Jan will be provided by 21 Feb +2WD (highlighted yellow)

On the 21/03/2019 (VAR Date column), SF data for 28 Feb 2019 is available (February Reporting Period) . The Billing report for Feb will be provided by 21 Mar +2WD.(highlighted yellow)

Since the Billing report for Jan is produced, R2 data for 31 Jan 2018 and R1 data for 31 Jan 2019 (last Sett Dates in a reporting month) are available (highlighted orange).

Sett Date	Sett Code	DA Run Date	SVA Notification Date	VAR Date	Notif Date	Payment Date
29/10/2018	R2	18/02/2019	19/02/2019	20/02/2019	22/02/2019	27/02/2019
20/07/2018	R3	18/02/2019	19/02/2019	20/02/2019	22/02/2019	27/02/2019
21/07/2018	R3	18/02/2019	19/02/2019	20/02/2019	22/02/2019	27/02/2019
22/07/2018	R3	18/02/2019	19/02/2019	20/02/2019	22/02/2019	27/02/2019
03/01/2018	RF	18/02/2019	19/02/2019	20/02/2019	22/02/2019	27/02/2019
31/01/2019	SF	19/02/2019	20/02/2019	21/02/2019	25/02/2019	28/02/2019
04/01/2019	R1	19/02/2019	20/02/2019	21/02/2019	25/02/2019	28/02/2019
05/01/2019	R1	19/02/2019	20/02/2019	21/02/2019	25/02/2019	28/02/2019
06/01/2019	R1	19/02/2019	20/02/2019	21/02/2019	25/02/2019	28/02/2019
01/02/2019	SF	20/02/2019	21/02/2019	22/02/2019	26/02/2019	01/03/2019
02/02/2019	SF	20/02/2019	21/02/2019	22/02/2019	27/02/2019	04/03/2019
03/02/2019	SF	20/02/2019	21/02/2019	22/02/2019	27/02/2019	04/03/2019
07/01/2019	R1	20/02/2019	21/02/2019	22/02/2019	26/02/2019	01/03/2019
31/10/2018	R2	20/02/2019	21/02/2019	22/02/2019	26/02/2019	01/03/2019
24/07/2018	R3	20/02/2019	21/02/2019	22/02/2019	26/02/2019	01/03/2019
05/01/2018	RF	20/02/2019	21/02/2019	22/02/2019	26/02/2019	01/03/2019
06/01/2018	RF	20/02/2019	21/02/2019	22/02/2019	26/02/2019	01/03/2019
07/01/2018	RF	20/02/2019	21/02/2019	22/02/2019	26/02/2019	01/03/2019
04/02/2019	SF	21/02/2019	22/02/2019	25/02/2019	28/02/2019	05/03/2019
08/01/2019	R1	21/02/2019	22/02/2019	25/02/2019	27/02/2019	04/03/2019
30/01/2019	R1	15/03/2019	18/03/2019	19/03/2019	21/03/2019	26/03/2019
23/11/2018	R2	15/03/2019	18/03/2019	19/03/2019	21/03/2019	26/03/2019
24/11/2018	R2	15/03/2019	18/03/2019	19/03/2019	21/03/2019	26/03/2019
25/11/2018	R2	15/03/2019	18/03/2019	19/03/2019	21/03/2019	26/03/2019
16/08/2018	R3	15/03/2019	18/03/2019	19/03/2019	21/03/2019	26/03/2019
30/01/2018	RF	15/03/2019	18/03/2019	19/03/2019	21/03/2019	26/03/2019
27/02/2019	SF	18/03/2019	19/03/2019	20/03/2019	22/03/2019	27/03/2019
31/01/2019	R1	18/03/2019	19/03/2019	20/03/2019	22/03/2019	27/03/2019
26/11/2018	R2	18/03/2019	19/03/2019	20/03/2019	22/03/2019	27/03/2019
17/08/2018	R3	18/03/2019	19/03/2019	20/03/2019	22/03/2019	27/03/2019
18/08/2018	R3	18/03/2019	19/03/2019	20/03/2019	22/03/2019	27/03/2019
19/08/2018	R3	18/03/2019	19/03/2019	20/03/2019	22/03/2019	27/03/2019
31/01/2018	RF	18/03/2019	19/03/2019	20/03/2019	22/03/2019	27/03/2019
28/02/2019	SF	19/03/2019	20/03/2019	21/03/2019	25/03/2019	28/03/2019
01/02/2019	R1	19/03/2019	20/03/2019	21/03/2019	25/03/2019	28/03/2019
02/02/2019	R1	19/03/2019	20/03/2019	21/03/2019	25/03/2019	28/03/2019
03/02/2019	R1	19/03/2019	20/03/2019	21/03/2019	25/03/2019	28/03/2019
27/11/2018	R2	19/03/2019	20/03/2019	21/03/2019	25/03/2019	28/03/2019

Priority: Must Have

P402-BR-6 LDSOs provide annual HH Tariff Setting data

Requirement

Each year, within [**3**] WD of the Initial Volume Allocation Run for the 30 September, each Licensed Distribution System Operator (LDSO) must provide Tariff Setting Data for Single Sites whose Imports are measured by HH Lead Metering Systems registered in SMRS or CMRS. This includes both Final Demand and Non-Final Demand Single Sites.

Tariff Setting data is described below:

> A sum of gross Imports to Single Sites [therefore including the imports from Lead and additional metering systems where appropriate and excluding imports from additional metering systems where they are already attributed to the Lead metering system by aggregation rules] (KWh) between 1 October (of the previous year) to 30 September, categorised by LLFC within each GSP Group for the Reporting Period, relating to each Distributor ID. Imports to be provided for all import metering systems, i.e. all Lead and additional MSIDs.
>
> The LDSO must use Imports based on the most recent Settlement Run available at the time of producing the report and exclude exports, it must not provide a net value of imports (i.e. by subtracting exports).

LDSO will exclude Metering Systems whose Imports are measured by measurement classes 'F' and 'G' from their Billing and Tariff Setting data. These will be treated as though they are NHH MSIDs and so will be included in the determination of NHH Billing and Tariff Setting Data.

Proposed Fields

Distributor ID (MPID)	GSP Group	Line Loss Factor Class (LLFC)	Sum of gross Imports measured	Reporting Period
	_B			
	_B			

Priority: Must Have

P402-BR-24 SVAA obtains monthly NHH Billing data (current Reporting Period)

Requirement

Within [**2**] WD of the Initial Volume Allocation Run (type=SF) for the last Settlement Day of each Reporting Period, BSCCo (SVAA) must derive Non Half Hourly Billing data to enable the production of the monthly Billing Report for NETSO.

Billing data is described below:

- SVAA derives NHH Billing Data, i.e. count of Metering Systems for each Settlement Day in the Reporting Period by summing the D0030 SPM Total EAC Count and SPM Total AA Count LLFC, GSP Group and Registrant ID, for each Distributor ID.

Note that the Count of Single Sites must not include de-energised sites.

Proposed Fields

Distributor Id (MPID)	Line Loss Factor Class (LLFC)	GSP Group	Registrant ID	Settlement Day	Settlement Run Type	Count of Metering Systems	Reporting Period
EMEB	123	_B	SOUT	01/03/2021	SF		
EMEB	123	_B	MIDE	01/03/2021	SF		

Priority: Must Have

P402-BR-34 SVAA obtains monthly NHH Billing data (earlier Reporting Periods)

Requirement

Within [**2**] WD of the Initial Volume Allocation Run (type=SF) for the last Settlement Day of each Reporting Period, BSCCo (SVAA) must derive **updated** Non Half Hourly Billing data for earlier Reporting Periods to enable the production of the monthly Billing Report for NETSO. See example relating to earlier Reporting Period in P402-BR5.

Billing data is described below:

- SVAA derives NHH Billing Data, i.e. count of Metering Systems for each Settlement Day in the Reporting Period by summing the D0030 SPM Total EAC Count and SPM Total AA Count LLFC, GSP Group and Registrant ID, for each Distributor ID.

  Note that the Count of Single Sites must not include de-energised sites.

Proposed Fields

Distributor Id (MPID)	Line Loss Factor Class (LLFC)	GSP Group	Registrant ID	Settlement Day	Settlement Run Type	Count of Metering Systems	Reporting Period
EMEB	123	_B	SOUT	01/03/2021	SF		
EMEB	123	_B	MIDE	01/03/2021	SF		

Priority: Have

P402-BR-25 SVAA obtains annual NHH Tariff Setting data

Requirement

Each year, within [**2**] WD of the Initial Volume Allocation Run for the Settlement Day 30 September, SVAA must derive Non Half Hourly Tariff Setting data for Final Demand Import across all LDSOs for each Distributor ID.

NHH Tariff Setting data is described below:

For each LDSO's Distributor ID, a sum of gross Imports for Non Half Hourly MSIDs (KWh), categorised by LLFC within each GSP Group for the Reporting Period.

NHH Gross Imports are determined by summing the D0030 Daily Profiled SPM Total EAC and Daily Profiled SPM Total Annualised Advances for each Settlement Day of the Reporting Period.

SVAA must use Imports based on the most recent Settlement Run for each Settlement Date of the Reporting Period available at the time of producing the report.

Proposed fields

Distributor Id (MPID)	Line Loss Factor Class (LLFC)	GSP Group	Gross Imports (KWh)	Reporting Period
EMEB		_B		
EMEB		_B		

Assumption (to be confirmed during consultation)

The mapping of NHH LLFC to Charging Band for determining Billing Data, i.e. site counts, is the same mapping for tariff setting data i.e. aggregating consumption data.

Priority: Must Have

P402-BR-10 LDSOs to provide LLFC->Charging Band mapping
Requirement

Each LDSO must provide and maintain a table that maps LLFCs to Charging Bands in accordance with the rules set out in BSCP509 for MDD. The scope of this mapping includes all LLFCs for all SVA metering systems and pseudo LLFCs for all Single Sites with CVA metering systems (where LLFCs for CVA Single Sites are provided by LDSOs), registered in both SVA and CVA, with Effective From and Effective To dates for each LLFC to Charging Band mapping.

Charging Band Descriptions should be the same as those used in LDSO Charging Statements, except for non-chargeable bands which are specifically defined for the purposes of this process under the BSC. The Charging Band Description must clearly state whether the Charging Band is non chargeable. When reporting the Charging Bands, LDSOs will use a valid set as follows:

- Dom – Domestic
- LVN1 – LV No MIC band 1
- LVN2 – LV No MIC band 2
- LVN3 – LV No MIC band 3
- LVN4 – LV No MIC band 4
- LV1 – LV MIC band 1
- LV2 – LV MIC band 2
- LV3 – LV MIC band 3
- LV4 – LV MIC band 4
- HV1 – HV band 1
- HV2 – HV band 2
- HV3 – HV band 3
- HV4 – HV band 4
- EHV1 – EHV band 1
- EHV2 – EHV band 2
- EHV3 – EHV band 3
- EHV4 – EHV band 4
- UMS – Unmetered Supplies

- Non-chargeable

The mapping of NHH LLFC to Charging Band for determining Billing Data, i.e. site counts, is the same mapping for tariff setting data i.e. aggregating consumption data.

Proposed Fields

Distributor ID (MPID)	GSP Group	LLFC ID	Charging Band	Charging Band Description	Effective from date	Effective to date
EMEB	_B	123	LV1	Low Voltage 1		
EMEB	_B	134	LV1	Low Voltage 1		
EMEB	_B	aaa	EV1	Extra High Voltage 1		
EMEB	_B	111	NA	Non-chargeable		

Note: this example is for illustrative purposes and subject to change.

The aim is to ensure that all Billing and Tariff data can be correctly mapped to Charging Bands and to Registrant details as recorded by the Central Registration Agent (CRA).

Priority: Must Have

P402-BR-28 LDSOs to provide internal LLFC/pseudo MPID/CVA MSID mapping

Requirement

Each LDSO must provide to BSCCo a mapping of pseudo CVA LLFC IDs (as held within LDSO billing systems), pseudo MPIDs (registrant identifiers as held within LDSO billing systems) and CVA MSIDs, in accordance with the rules set out in BSCP509 for MDD.

Registrant ID will be used to represent the pseudo MPIDs held in LDSO billing systems, which have four numerical characters, in contrast to ordinary MPIDs which are four letters long.

Pseudo LLFCs are a representation of LLFC IDs created by LDSOs for each CVA Single Site. These are not ordinary LLFCs, otherwise used for Settlement purposes.

Each LDSO may maintain records of CVA Sites in different ways, in some cases the CVA LLFC may be the same as the CVA MSID. Where the LDSO is unsure, they can liaise with BSCCo to resolve. Whether the CVA LLFC and CVA MSID are the same or different, LDSOs must populate both columns.

This requirement only applies to CVA Sites.

Note: While the final table will need to contain the suggested items, in practice LDSOs may first submit an interim (initial) table to BSCCo so that BSCCo can liaise with the LDSO and agree the correct mapping of LDSO details.

Proposed Fields

Distributor ID (MPID)	GSP Group	pseudo CVA LLFC	CVA MSID	Registrant ID	Effective from date	Effective to date
EMEB	_B	aaa		1234		
	_B					

Note: this example is for illustrative purposes and subject to change.

The aim is to ensure that all Billing and Tariff data can be correctly mapped to Charging Bands and to Registrant details as recorded by CRA.

Priority: Must Have

P402-BR-40 BSCCo to provide CVA MSID->BM Unit/BSC Party ID mapping

Requirement

BSCCo must produce and publish a mapping of CVA MSIDs to BM Unit ID and BSC Party ID, in accordance with the rules set out in BSCP509 for MDD. BSCCo will use the pseudo LLFC/pseudo MPID to CVA MSID mapping provided by LDSOs to produce this.

Note that this only applies for CVA sites.

Proposed Fields

Distributor ID (MPID)	GSP Group	CVA MSID	BSC Party ID	BM Unit ID	Effective from date	Effective to date
EMEB	_B			E_PETEM1		
	_B					

Note: this example is for illustrative purposes and subject to change.

The aim is to ensure that all Billing and Tariff data can be correctly mapped to Charging Bands and to Registrant details as recorded by CRA.

Priority: Have

P402-BR-30 Ensure mapping details are kept up to date

Requirement

Each LDSO must ensure that the mapping tables described in P402-BR-10 and P402-BR-28 are kept up to date in accordance with the MDD change process set out in BSCP509. Upon changes to the mapping tables, only changed records need to be provided, rather than an entire updated table.

BSCCo must ensure that the mapping table described in P402-BR-40 is kept up to date in accordance with the MDD change process set out in BSCP509. Upon changes to the mapping tables, only changed records need to be provided, rather than an entire updated table.

Priority: Must Have

P402-BR-50 Ensure mapping details are published

Requirement

Mapping tables described in P402-BR-10, P402-BR-28 and P402-BR-40 must be published and available to BSC Parties via the Elexon Portal in a format that enables efficient analysis e.g. CSV or Excel. Note that although these mapping tables form a part of MDD, they will not be included in D0269/D0270 MDD Data Flows and will simply be published alongside all other MDD on the Elexon Portal.

Priority: Must Have

Validations and exceptions

P402-BR-8 SVAA validates Billing Report data

Requirement

The SVAA must perform the following validation of Billing Report data provided by each LDSO

1) Structural validation: validation of the file and data in accordance with the specification set out in the relevant Code Subsidiary Document.

2) Business validation:

a) has Billing data been provided by all LDSOs (all expected Distributor IDs)

b) check for anomalies in accordance with an agreed threshold: 20% change in the number of sites within each Charging Band within a GSP Group, as compared to the previous month. Note that this does not apply to the first month following implementation as there will be nothing to compare against.

c) based on the SVAA Settlement Calendar, check that Billing Data includes all expected Reporting Periods, whether subject to the Initial Volume Allocation Run or a Reconciliation Volume Allocation Run.

This is done as follows:

1. For the current month which reports on the most recent Reporting Period (i.e. last calendar month), identify the date of the SF VAR date applicable to the last date in the Reporting Period using the SVAA Settlement Calendar. E.g. if the Reporting Period is January 2020, find the associated SF VAR date for 31 January 2020. This will be 21 Feb 2020. Check that Billing Data for January 2020 has been received by 21 Feb 2020 + 2WD.
2. Using the SVAA Settlement Calendar, determine the SF VAR carried out for the previous Reporting Period, December 2019. This will be 22 January 2020.
3. Check whether, since the SF VAR date of the previous Reporting Period (22 Jan 2020) and the SF VAR date of the current Reporting Period (21 Feb 2020), any Initial Volume Allocation Runs or Reconciliation Volume Allocation Runs have been carried out for Settlement Dates where the Settlement Date is the last date of the month and has one of the following Settlement Codes: SF, R1, R2, R3, RF. If this is the case, then check whether Billing Data has been received for the Reporting Period of these Settlement Dates.

d) check that the combination of Distributor ID, LLFC and GSP Group is correct for the Reporting Period.

In the event of a validation failure, the SVAA must seek to resolve with LSDO(s) within 2WD.

If, for the check outlined in b), following discussion with the relevant LDSO(s) the data remains correct, the SVAA notes this when providing the Billing Report to NETSO, via an exception report or otherwise.

For the avoidance of doubt, the scope of this validation does not check for accuracy of data.

The solution must ensure that, for any validation failure, SVAA must provide an exception report to the relevant LDSO(s) as per BR-38 SVAA sends exception reports to LDSOs.

Priority: Should Have

P402-BR-9 SVAA validates Tariff Setting data

Requirement

The SVAA must perform the following validation of Tariff Setting data provided by each LDSO

1) Structural validation: validation of the file and data in accordance with the specification set out in relevant Code Subsidiary Document.

2) Business validation: validation to check for anomalies in accordance with an agreed threshold

a) has Tariff setting data been provided by all LDSOs (all expected Distributor IDs)

b) check for anomalies in accordance with an agreed threshold: 20% change in the level of import within each Charging Band within a GSP Group, as compared to the previous year. Note that this does not apply to the first year as there will be nothing to compare against.

c) check that the combination of Distributor ID, LLFC and GSP Group is correct for the Reporting Period.

In the event of a validation failure, the SVAA must seek to resolve with LSDO(s) within 2WD.

If, for the check outlined in b), following discussion with the relevant LDSO(s) the data remains correct, the SVAA notes this when providing the Tariff Setting Report to NETSO, via an exception report or otherwise.

The solution must ensure that, for any validation failure, SVAA must provide an exception report to the relevant LDSO(s) as per BR-38 SVAA sends exception reports to LDSOs.

Priority: Should Have

P402-BR-38 SVAA sends exception reports to LDSOs

The solution must ensure that, for any validation failure of the checks set out in P402-BR-8 SVAA validates Billing Report data and P402-BR-9 SVAA validates Tariff Setting data, SVAA provides an exception report to the relevant LDSO(s) detailing the validation failure in a human readable format containing the details of the record and reason for failure, as soon as practically possible [latest within the same day].

Priority: Must Have

P402-BR-27 SVAA sends exception report to BSCCo & NETSO

Requirement

SVAA shall capture, collate and provide details of Billing and Tariff Setting Data it was expecting to receive, but did not, and any threshold breaching events, to BSCCo and NETSO as set out in P402-BR-8 SVAA validates Billing Report data and P402-BR-9 SVAA validates Tariff Setting data, at the same time as providing the consolidated Billing and/or Tariff Setting data. For example, missing data for Distributor IDs, Settlement Dates or Reporting Periods. This may also include details of instances of anomalies identified in the data as a result of validation checks, that following investigation with the LDSO(s) is valid. The report must contain the details of the records that have generated exceptions and the reason for failure.

Priority: Must Have

P402-BR-41 LDSOs address validation failures

LDSOs must address and resolve the validation failures provided in the exception report as soon as possible by submitting corrected data or confirming that the original data is correct. If corrected/updated data cannot be provided for the current Reporting Period, LDSOs must provide it as part of the report for the next Reporting Period (where the resolution is within the LDSO's control).

Priority: Must Have

Transformation

P402-BR-14 SVAA consolidates all monthly Billing Report data

Requirement

Within [4WD] of the Initial Volume Allocation Run for final day of the most recently completed billing Reporting Period, SVAA must determine and aggregate the count of Final Demand Sites within each Charging Band, for each Registrant (BSC Party) and by BM Unit, on each Settlement Day for each Settlement Run Type, of the Reporting Period by GSP Group across all LDSOs (Distributor IDs).

SVAA must also determine the count of **updated** Final Demand Sites for all NHH and HH Billing Data received for earlier Reporting Periods (see LDSOs provide monthly HH Billing data for examples).

Where the Registrant ID corresponds to a Supplier ID, the BM Unit relates to the Supplier's Base BM Unit.

Where the Registrant ID does not correspond to a Supplier ID and the LLFC is contained in the LLFC-->BM Unit mapping table, the Registrant ID will be the BSC Party ID from the LLFC--> BM Unit mapping table.

Proposed fields for aggregating Billing data

Distributor Id (MPID)	Charging Band	GSP Group	BSC Party ID*	Settlement Day	BM Unit ID	Settlement Run Type	Count of Final Demand Sites	Reporting Period
EMEB		_B		01/03/2021	2__AIMPO000	SF		Sep-2020
EMEB		_B		01/03/2021	2__AIMPO001	SF		Oct-2020

*BSC Party ID - where SVAA receives Billing data where the Registrant ID is a Supplier ID then it must derive the BSC Party ID from the Supplier ID, whereas where the Registrant ID relates to CVA Sites the BSC Party is as provided in the LLFC--> BM Unit mapping table.

Note that the example above is for illustrative purposes and is subject to change

Applicable rules

1. Site counts included are those that are mapped to a chargeable Charging Band as specified in the DCUSA's residual charging arrangements, i.e. not mapped to an LDSO defined Charging Band where the description shows that it is non chargeable.

2. The list of LDSOs includes all Distribution Network Operators (DNOs) and Independent Distribution Network Operators (IDNOs).

3. If any exceptions have not been resolved at this point, updated data will be picked up in the next Reporting Period.

Priority: Must Have

P402-BR-15 SVAA consolidates annual Tariff Setting data
Requirement

Each year within [4WD] of the Initial Volume Allocation Run for the 30 September, SVAA must determine the Final Demand Import (MWh) for each chargeable Charging Band within each GSP Group, across all LDSOs (Distributor IDs) for the 12 month Reporting Period. It does this by referring to the Tariff Setting Data it has received from LDSOs and derived from Settlement Data, and with reference to the LLFC->Charging Band mapping.

Proposed fields for aggregating Tariff Setting data

Distributor ID (MPID)	Charging Band	GSP Group	Sum of gross Imports measured (MWh)	Reporting Period
EMEB		_B		
EMEB		_B		

Priority: Must Have

P402-BR-35 SVAA reports missing data as null
When consolidating/aggregating Billing Report and Tariff Setting data, SVAA must report any missing counts of Final Demand Sites or Final Demand Import (MWh) as null values.

Priority: Must Have

Data Outputs

P402-BR-18 SVAA publishes Billing Report for NETSO

Requirement

Within [5WD] of the Initial Volume Allocation Run for the final day of the most recent Reporting Period, SVAA will publish the Billing Report containing consolidated monthly Billing Report data for NETSO and BSC Parties to obtain via a programmable interface and user access control.

Proposed fields for Billing Report

Charging Band	GSP Group	BSC Party ID	BM Unit ID	Settlement Day	Settlement Run Type	Final Demand Site Count	Reporting Period
	_B			01/03/2021	SF		Nov-2020
	_B			01/03/2021	SF		Dec-2020

Note: there is an option under consideration to make the monthly Billing Report and annual Tariff Setting data available to NETSO via the ELEXON Portal (e.g. similar to the P114 functionality) – rather than sending files to NETSO via communication channels, in order to avoid transmitting substantially large (predicted to be gigabyte level for Billing Reports) files via communication channels such as email.

The preferred file format for providing this data is JSON.

Priority: Must Have

P402-BR-19 SVAA publishes Tariff Setting Report to NETSO

Requirement

Each year within [5WD] of the Initial Volume Allocation Run for the 30 September, SVAA must publish the Tariff Setting Report containing consolidated annual Tariff Setting Report data for NETSO and BSC Parties to obtain via a programmable interface and user access control.

Proposed fields for Tariff Setting report

Charging Band	GSP Group	Sum of gross Imports measured (MWh)	Reporting Period
	_B		
	_B		

The preferred file format for providing this data is JSON.

Note: there is an option under consideration to make the monthly Billing Report and annual Tariff Setting data available to NETSO via the ELEXON Portal (e.g. similar to the P114 functionality) – rather than sending files to NETSO via communication channels, in order to avoid transmitting substantially large (predicted to be gigabyte level for Billing Reports) files via communication channels such as email.

Priority: Must Have

P402-BR-16 SVAA provides UMS Data to NETSO

Requirement

As per existing P0210 daily reporting frequency, BSCCo (SVAA) will provide to NETSO, the following Unmetered Supplies (UMS) data in kwh, that is not (GSP Group) corrected nor loss adjusted:

1) The solution will provide HH UMS consumption data by aggregating 'Aggregated Supplier Consumption' using the following consumption component classes (source = D0040):

- Data aggregation type DAT = H
- Metered/unmetered indicator = U
- Consumption Component Indicator = C

2) The solution will provide NHH UMS consumption data by aggregating 'Daily Profiled SPM Total Annualised Advance' and 'Daily Profiled SPM Total EAC' using the following consumption component classes (source = D0030):

- Data Aggregation Type = N
- Metered/unmetered = U
- Consumption Component Indicator = C

These will be reflected in the P0210 TUoS Report as new data items in the HHA group with the following names:

'NHH Unmetered Supplies Allocated Volume'
'HH Unmetered Supplies Allocated Volume'

Priority: Must Have

P402-BR-31 Billing & Tariff Reports available for 1 year

Requirement

The solution must ensure that the consolidated Billing Reports and Tariff Setting Reports continue to be available to NETSO to access using the agreed mechanism for one year from the date of publication.

Priority: Must Have

P402-BR-36 Data Retention

The solution must enable both HH and NHH Billing and Tariff data, provided by LDSOs and obtained by the SVAA, to be available to SVAA for 28 months from the applicable Settlement Date.

Priority: Must Have

Business Rules

P402-BRL-1 Reporting Period - Billing Data

A reporting period is a calendar month, e.g. for the Reporting Period of 1-30 April, each LDSO will provide Billing data within 2WD of the SF run for 30 April, which will be in May. Note that the legal text refers to the term calendar month instead of Reporting Period.

P402-BRL-2 Reporting Period - Tariff Setting Data

The reporting period will be the most recent 12 month period from 1 October to 30 September. For example, the reporting period in a report produced in October 2021 will be 1 October 2020 to 30 September 2021.Note that the legal text refers to a 12 month period instead of Reporting Period.

P402-BRL-3 Measurement Class F and G are treated as NHH

LDSO will exclude Metering Systems whose Imports are measured by measurement classes 'F' and 'G' from their Billing and Tariff Setting data. These will be treated as though they are NHH MSIDs and so will be included in the determination of NHH Billing and Tariff Setting Data.