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 Alternative

Introduction

Purpose

This 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 Modification Proposal P402 to industry members and service providers for the P402 Alternative Solution.

It enables an 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 enables NETSO to obtain data to enable it to set new residual charging tariffs and to bill Parties according to those tariffs.

Objectives and Scope

The objective of P402 'Enabling reform of residual network charging as directed by the Targeted Charging Review' is to provide NETSO with data it can use to set and recover residual TNUoS charges from Parties in accordance with the new arrangements proposed by CUSC Modifications CMP334, 335, 336, 340 and 343. Therefore P402 intends to provide NETSO with data for:

- Setting Residual Tariffs for Final Demand Sites (excluding UMS):
- Billing CUSC Parties based on Residual Tariffs for Final Demand Sites; and
- Setting Residual Tariffs and billing CUSC Parties for UMS.

The scope of the P402 Alternative Solution ensures the provision of data by LDSOs necessary to allow NETSO to set residual charge tariffs and calculate and invoice TNUoS charges. That is, every month LDSOs will provide daily site count and UMS consumption data for each Distributor ID to NETSO via an agreed file format. Also, every year LDSOs will provide twelve months' actual historical consumption data (excluding UMS consumption data). This data is derived from each LDSOs' own systems (e.g. their billing systems) and covers data for:

- Half Hourly and Non-Half Hourly Metering Systems registered for CVA and SVA; and
- UMS

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: Single Sites and Final Demand Sites exclude those Sites for users who own or operate a Distribution System.

For the purposes of the BSC, the data items listed above also include (or may include) Domestic Premises.

In addition, this proposal refers to the following terms:

BSC Party ID = an eight character ID as defined in the NETA Interface Definition Document (IDD).

Charging Band = DCUSA Schedule 32 'Residual Charging Bands' describes how Final Demand Sites are allocated to charging bands for the purposes of setting and levying residual fixed charges. The DCUSA describes seventeen charging bands: a single band covering all domestic premises that are Final Demand Sites and sixteen bands covering all non-domestic premises that are Final Demand Sites. In addition to these bands, P402 Alternative Solution requires that LDSOs uses an 18th band for reporting UMS volumes.

Registrant = Registrant of the of the Lead Metering System(s) that measure Imports to the Final Demand Site or UMS as defined in the BSC.

Registrant ID = The Registrant ID is either the Supplier ID for Final Demand Sites or UMS with Metering Systems registered for SVA, or BSC Party ID for Final Demand Sites with Metering Systems registered for CVA.

Distributor ID = a four character ID as defined in the SVA Data Catalogue

Supplier ID = a four character ID as defined in the SVA Data Catalogue

GSP Group = as defined in the BSC

Architecture Fit

This subsection describes the extent to which this proposal fits into existing systems and processes or would require the design of new systems and/or processes.

This Alternative Solution impacts LDSOs, NETSO and BSCCo.

LDSO – the production and sending of the reports described by this solution would be a new set of requirements for LDSOs and likely represents a moderate fit with LDSOs' existing billing systems. That is, site count and consumption data for Final Demand Sites with SVA and CVA metering is already held in LDSOs' billing systems. However, LDSOs' are likely to need to make changes to their billing systems to produce the necessary reports. Furthermore, LDSOs' billing systems may not have details of the specific BSC Party Registrant details for CVA sites or details for mapping LLFCs to Charging Bands. Therefore it is likely that LDSOs would need to make system or process changes to ensure that output reports contain necessary registrant details and that site counts and consumption are mapped to charging bands. This solution proposes reporting Final Demand Sites Imports on an annual basis, rather than a monthly basis (as is proposed for site counts and UMS data), which should reduce the burden on LDSOs systems if P402 processes are run simultaneously with existing monthly billing runs. Finally, each LDSO will need to establish an interface with NETSO for sending the reports described by this solution.

NETSO – the receipt and processeing of the reports described by this solution would be a new set of requirements for NETSO. Whilst this solution seeks to ensure that reports sent by LDSOs require a minimum amount of transformation by NETSO, the overall impact of the TCR changes is likely to represent a significant impact requiring new systems and the modification of existing systems. These new and modified systems will receive and process the reports described by this solution. Finally, each LDSO will need to establish an interface with NETSO for sending the reports described by this solution.

BSCCo – this alternative solution is a good fit with BSCCo's existing systems and processes. That is, it will require no new system changes or activities. BSCCo may be required to use its existing Analysis and Insight Product from time to time to support LDSOs with the identification of CVA Registrants.

References

| Document | Author | Date |
|--|--------|-------------------|
| P402 Initial Written Assessment | ELEXON | 5 March 2020 |
| P402 Assessment Procedure Consultation | ELEXON | 7 October 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 or consumption data broken down by charging band.

Future State

This process model (accessible via the link below) provides an overview of the P402 Alternative Solution. Items highlighted in blue indicate existing activities, white indicate new for P402 Alternative.

https://cawemo.com/share/caabe83c-aa01-4660-bf46-065238de8061

Interim Solution

Following implementation, the first annual Tariff Setting report is due in October 2022, however by this time a full year's worth of input data will not be available to LDSOs. Therefore, for October 2022, LDSOs and NGESO will bilaterally agree an approach for the provision of Final Demand data for the Tariff Setting report for this interim period. The first Tariff Setting report will be provided in October 2023.

Business Requirements

Business Requirements

P402-BR-42 LDSOs provide monthly data to NETSO

Within [5] WD of receiving the D0030 'Aggregated DUoS Report' data flow, in relation to each Distributor ID, sent as part of the Initial Volume Allocation Run (SF) for the last day of a calendar month, each Licensed Distribution System Operator (LDSO) must provide the following data to NETSO in a single report for each day of the calendar month :

1) Count of Final Demand Sites

Billing data is the count of all Final Demand Sites connected to an LDSO's Distribution System and is reported by each combination of Distributor ID, GSP Group, Settlement Day (in the calendar month), Settlement Run Type, Registrant ID and Charging Band.

2) UMS data for Single Sites (HH and NHH)

Unmetered Supplies (UMS) data is the measured Imports (MWh), which is not (GSP Group) corrected nor loss adjusted, by each combination of Distributor ID, GSP Group, Settlement Day (in the calendar month), Settlement Run Type, Registrant ID and Charging Band (see applicable rules below).

Applicable Rules

If an LDSO does not receive a D0030 containing SF data for the last day of a calendar month by the time it receives a D0030 containing SF data for the last day of the next calendar month, then it does not need to report in accordance with this requirement for the calendar month for which a D0030 was not received. This does not absolve the LDSO of its responsibility under P402-BR-43.

LDSOs must attribute Site Counts and UMS Imports to a BSC Registrant, either using the Party's Supplier ID where sites' Metering Systems are registered for SVA or the Party's BSC Party ID where the sites' Metering Systems are registered for CVA. LDSOs may use existing Settlement data flows defined in the Data Transfer Catalogue (e.g. the D0030) and the Interface Definition Document (e.g. CDCA-I012, CDCA-I014 and CRA-I014) to determine how to attribute site counts and Imports to the correct BSC Party.

The data will be mapped to Charging Bands, as specified in each LDSOs Relevant Charging Statement (as defined in the Distribution Connection and Use of System Agreement). 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

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

When providing UMS consumption data, LDSOs will attribute this to a distinct UMS Charging Band. Note that this is a charging band defined for the purpose of the P402 Alternative Solution, which is otherwise not defined by the DCUSA. All LDSOs will use the same UMS charging band id ,'UMS'.

When providing UMS consumption data, LDSOs will enter a 'null' value in the Site count because the file format to be used (see below) reports both Site counts and consumption on the same line for the Settlement Day and Settlement Run, and LDSOs are not required to report Site counts for UMS.

When reporting a Final Demand Site Count, LDSOs will enter a 'null' value for the Sum of Gross Imports because the file format to be used (see below) reports both Site counts and consumption on the same line for the Settlement Day and Settlement Run, and Final Demand Imports (except for UMS) will be reported once a year in October as part of a separate annual report (see P402-BR-48 below).

Proposed report content and structure

| Distributor ID | GSP Group | Settlement Day | Settlement Run | Registrant ID | Charging Band | Count of Final Demand Sites | Sum of gross Imports measured (MWh) |
|-------------------|--------------|-------------------|-------------------|------------------|--------------------------------------|--------------------------------------|--|
| CHAR4 | CHAR2 | YYYYMMDD | CHAR2 | CHAR8 | VARCHAR5 – see valid set above | NUM10 | DECIMAL(10,4) |
| e.g. 'EELC' | e.g. '_A' | '01042022' | e.g. 'SF' | e.g. 'FLEX' | e.g. 'LVN1' | 4000 | [null] |
| e.g. 'EELC' | e.g. '_A' | '01042022' | e.g. 'SF' | e.g. 'FLEX' | e.g. 'UMS' | [null] | 4444.453 |

| e.g. 'EMEB' | e.g. '01042022' '_B' | e.g. 'SF' | e.g. 'BRITGAS' | e.g. 'EHV1' | 3245 | [null] |
|----------------|-------------------------|-----------|-------------------|-------------|------|--------|
|----------------|-------------------------|-----------|-------------------|-------------|------|--------|

Example CSV file format:

HDR

EELC,_A,01042022,SF,FLEX,LVN1,4000,

EELC,_A,01042022,SF,FLEX,UMS,,4444.453

EMEB,_B,01042022,SF,BRITGAS,EHV1,3245,

FTR

*Where the Registrant ID relates to SVA data and is therefore a Supplier ID, it will be 4 characters of text. Where the Registrant ID relates to a CVA Registrant and is therefore a BSC Party ID it will be up to 8 characters in length.

Priority: Must Have

P402-BR-43 LDSOs provide updated monthly data to NETSO

Within [5] WD of receiving the D0030 'Aggregated DUOS Report' data flow sent as part of the Initial Volume Allocation Run (SF) for the last day of a calendar month in relation to each Distributor ID, each LDSO must provide **updated billing data** to NETSO for applicable calendar months that occurred before the calendar month being reported to NETSO in accordance with P402-BR-42.

That is, LDSOs must also send the most up to date site counts and UMS Import data for each day of a calendar month(s) where the last day of the calendar month(s) was the subject of a Reconciliation Volume Allocation Run since the last time the LDSO generated a report in accordance with P402-BR-42.

When reporting updated billing data for a calendar month(s) LDSOs must identify the Volume Allocation Run Type that occurred for each day of the calendar month(s).

Nb LDSOs should not report the difference between data at the most recent VAR and the preceding VAR. Nor should LDSOs report a nil or null value if there has been no change.

The data to be reported in accordance with this requirement should be combined with the data described in P402-BR-42 and reported to NETSO as a single monthly report. Therefore the file format and data items to be reported under this requirement are identical to those set out in requirement P402-BR-42.

P402-BR-42's Applicable Rules also apply to this requirement.

Example of reporting updated billing data for calendar months subject to Reconciliation VARs

Imagine that in accordance with P402-BR-42 on 11 March 2019 an LDSO produced a billing data report for the calendar month of January 2019. In accordance with P402-BR-42, the next billing data report will be produced for the calendar month of February 2019. It is likely the LDSO will need to produce its next billing data report by 11 April.

In between 11 March 2019 and 11 April SVAA will perform Reconciliation VARs for calendar months before February 2019. For example, on 20 March 2019 SVAA completed the R1 VAR for 31 January 2019 and the RF VAR for 31 January 2018. Therefore the LDSO should report updated site counts and UMS Import data for all days in January 2018 and January 2019 alongside the site counts and UMS Import data it reports for February 2019 in accordance with P402-BR-42.

Figure 1 illustrates the relationship between Settlement Days (i.e. the days of a calendar month to be reported) and the dates of VARs.

Figure1

| Sett Date 29/10/2018 20/07/2018 21/07/2018 | Sett Code R2 R3 | DA Run Date 18/02/2019 | SVA Notification Date | | Notif Date | Payment Date |
|--|-----------------------|---------------------------|-----------------------|------------|------------|--------------|
| 20/07/2018 | | 18/02/2019 | 40/00/0040 | | | |
| | R3 | | 19/02/2019 | 20/02/2019 | 22/02/2019 | 27/02/2019 |
| 21/07/2018 | 140 | 18/02/2019 | 19/02/2019 | 20/02/2019 | 22/02/2019 | 27/02/2019 |
| | 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 | ₽2 | 19/03/2019 | 20/03/2019 | 21/03/2019 | 25/03/2019 | 28/03/2019 |

Priority: Must Have

P402-BR-48 LDSOs provide an annual report of Final Demand Site Import data Measured gross Import for Final Demand Sites

Each year, within [5] WD of receiving the D0030 'Aggregated DUOS Report' data flow sent as part of the Initial Volume Allocation Run (SF) for the last day of September, LDSOs must send NETSO a report containing the sum of the last twelve months' actual metered Imports (MWh) to Final Demand Sites connected to the LDSO's Distribution System (excluding UMS), which are measured by Metering Systems registered for CVA or SVA, by each combination of Charging Band, Distributor ID and GSP Group.

The twelve month period to be reported must be the period running from 1 October to 30 September.

LDSOs must use Imports based on the most recent VAR available at the time of producing the report and exclude exports, i.e. it must not provide a net value of imports by subtracting exports.

This requirement takes effect from 1 October 2023. Until the 1 October 2023, LDSOs and NETSO will agree interim reporting arrangements that will enable NETSO to set residual tariffs in October 2021 and October 2022.

| Distributor ID | GSP Group | Charging Band | Sum of gross Imports measured (MWh) |
|-------------------|--------------|--------------------------------------|--|
| CHAR4 | CHAR2 | VARCHAR5 – see valid set above | DECIMAL(10,4) |
| e.g. 'EELC' | e.g. '_A' | e.g. 'LVN1' | |
| e.g. 'EMEB' | e.g. '_B' | e.g. 'EHV1' | |

Example CSV file format:

HDR EELC,_A,LVN1,5555.543 EMEB,_B,EHV1,2345.567 FTR

Priority: Must Have

P402-BR-44 Common file format - monthly billing report

A common file format must be used by all LDSOs to provide NETSO with monthly billing data in accordance with P402-BR-42 and P402-BR-43. LDSOs will use a CSV file format.

The proposed fields and structure for the file are set out in P402-BR-42. The detailed file definition will be set out in the SVA Data Catalogue.

Priority: Must Have

P402-BR-49 Common file format - annual billing report

A common file format must be used by all LDSOs to provide NETSO with monthly billing data in accordance with P402-BR-48. LDSOs will use a CSV file format.

The proposed fields and structure for the file are set out in P402-BR-48. The detailed file definition will be set out in the SVA Data Catalogue.

Priority: Must Have

P402-BR-47 Common interface

LDSOs will send the data using the common file formats described above to NETSO using SFTP or by another means as may be agreed between the LDSO and NETSO.

Priority: Must Have

P402-BR-45 Support the identification of CVA registrant details

BSCCo, e.g. via the BSC Service Desk, will support LDSOs with using existing BSC data flows and registration details, such as contained in the CDCA-I012 'Report Raw meter Data', CDCA-I014 'Estimated Data Report' and CRA-I014 'Registration Report', to identify the relationship between BSC Party IDs and CVA MSIDs. Where necessary BSCCo will help resolve any issues with the ordinary provision of this Settlement data which LDSOs may rely on to deliver the requirements of this alternative solution.

Priority: Must Have

P402-BR-46 Data Retention - 14 months

LDSOs must retain billing and tariff setting data, provided to NETSO, for a minimum of 14 months from the provision of this data to NETSO.

Priority: Must Have