P375 – Industry Expert Group

Settlement of Secondary BM Units using Metering behind the site Boundary Point

21 January 2021

Meeting Objectives and Agenda

Agenda Item	Lead
1. Introduction and Objectives	Elliott Harper (Chair)
2. P375 Summary	Craig Murray
3. VLP Hub High Level Principles	Colin Berry
4. Structure of New D-Flow	Colin Berry
5. Outstanding Questions	Workgroup
6. BSCP Updates	Iain Nicoll
7. Next Steps	Craig Murray
8. AOB	Workgroup
9. Meeting Close	Elliott Harper

Meeting Objectives:

- Discuss and agree VLP Hub solution
- Review / amend CSDs and data flows; and
- Agree answers to outstanding questions

P375 SUMMARY

P375 Summary

Solution

- P375 will allow the use of Asset Meters ‘behind’ the defined Boundary Point for Balancing Services, rather than the Boundary Point Meter
- This will allow more accurate measurement of balancing-energy volumes provided by the Balancing Service Provider, and lowers the barrier for entry for innovative business models (e.g. Demand Side Response)

Status

- P375 was sent to Ofgem on **16 December** with a unanimous recommendation for approval
- Legal text, Code of Practice 11 and amended BSCP601 approved and are not subject to further amendment
- Amendments to BSCP602 were noted by Panel, and it acknowledged that it may be subject to further changes
- Target implementation date of:
  - **23 June 2022** if Authority decision received by 30 April 2021; or
  - **3 November 2022** if Authority decision received after 30 April 2021 but before 30 June 2021

P375 Summary

Industry Expert Group

- Work is still required to amend the relevant Code Subsidiary Documents (CSDs) in line with the P375 solution. Specifically, the details of the 'VLP Hub' process
    - VLP Hub will be based as closely as possible on existing Supplier Hub Process to minimise disruption, with two key exceptions:
        1. VLPs will replace Suppliers a the centre of the hub
        2. No HHDA involvement – HHDCs will send data directly to SVAA
- Panel noted Elexon's recommendation that these CSDs be developed by an Industry Expert Group and issued for industry consultation Q1 2021 so P375 benefits can be realized as soon as possible
- Finalised CSDs will be presented to the Panel for approval if P375 is approved by the Authority

P375 Summary

Proposed Progression

Action	Date
Industry Expert Group – Meeting 1	21 January 2021
Industry Expert Group – Meeting 2	1 – 12 March 2021
Industry Consultation	22 March – 9 April 2021
Industry Expert Group – Meeting 3 (Provisional)	19 – 23 April 2021
Present to Panel	13 May 2021 or 8 July 2021

VLP HUB HIGH LEVEL PRINCIPLES

P375 ‘VLP Hub’ – High Level Principles (1 of 2)

P375 CSD amendments will introduce:

- New ‘VLP Hub’ processes will be added to BSCP502 and BSCP514
- New Qualification requirement for ‘VLP Hub’ members added to ‘SAD’
- New DTC Data Flow (‘Dxxxx’) for HHDCs to send data to SVAA
  - SVAA issues P0034 (Missing Data) or P0035 (Invalid Data) as appropriate
- New instances of each relevant Supplier Hub ‘D-flow’; AND
- New ‘P-flow equivalents’ of all Supplier Hub D-flows will be created
  - Identical structure, except for different
    - Headers and Footers and
    - Transfer mechanism

P375 ‘VLP Hub’ – High Level Principles (2 of 2)

- VLPs will be able to select their preferred transfer mechanism
- Where VLP Hub transactions are between Party Agents that both have a DTN Gateway, D-flows should be used
  - Suite of P-flows involving VLPs introduced for P344 (P278-P286, P278) should accommodate P375 data:
    - MSID Data Item should include AMSID as well as MSID
    - MSID Pair Data Item should include AMSID Pairs…
    - AMSIDs will be allocated by SVAA – 13 Digit number taken from an agreed range of numbers that will not be used for MSIDs
    - Assume VLPs would NOT need a MSID / AMSID Indicator in P-flows
    - AMSIDs identified from 1st 2 digits

P375 ‘VLP Hub’ – Amended BSCPs for P375 “VLP Hub”

BSCPs amended to define “VLP Hub” processes:

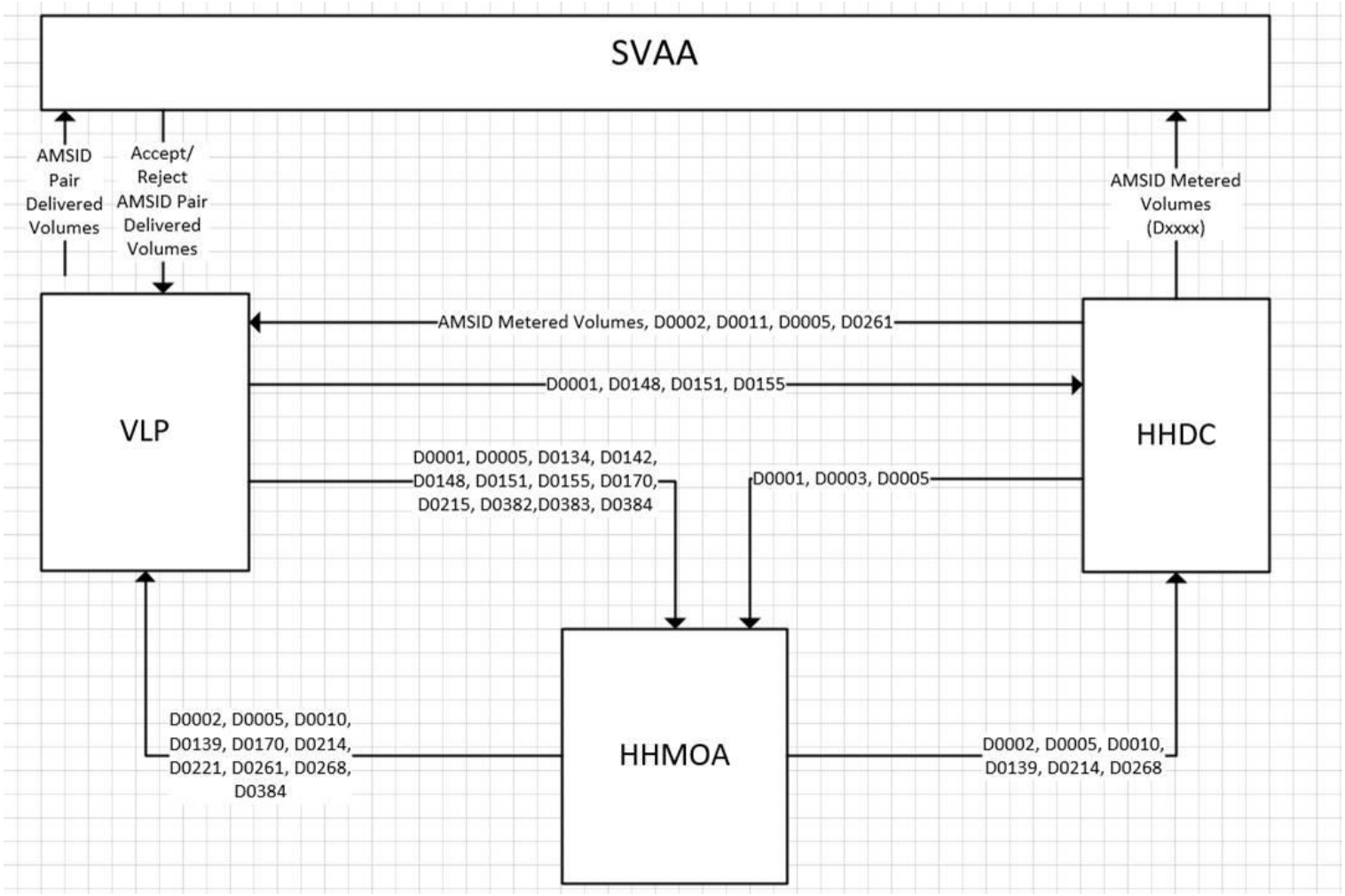
- BSCP502 – HH Data Collection for Metering Systems Registered in SMRS and Asset Metering Systems Registered with the SVAA
- BSCP514 – HH Meter Operation for Metering Systems Registered in SMRS and Asset Metering Systems Registered with the SVAA
- Self Assessment Document

BSCPs amended to support “VLP Hub” processes:

- BSCP01 – Overview of Trading Arrangements
- BSCP27 – Technical Assurance of Half Hourly Metering Systems for Settlement Purposes
- BSCP38 - Authorisations
- BSCP507 – Supplier Volume Allocation Standing Data Changes
- BSCP508 – Supplier Volume Allocation Agent
- BSCP602 – SVA Metering System Register

P375 ‘VLP Hub’ – Overview

The diagram below is indicative of the flows between VLP Hub participants and does not include flows between old and new instances of participants



ELEXON

P375 ‘VLP Hub’ – Use of Qualified Party Agents

Scenarios where VLPs must use BSC Qualified Party Agents:

BSC Qualified HHDC

- Asset Meters that have Half Hourly Integral Outstations that are designed to meet the criteria of Asset Metering Types 1, 2, 3 and 4 within CoP11 must be dialled and protocol tested by a BSC Qualified HHDC
- For Asset Metering Type 5, the VLP could elect to provide the service themselves (or via a 3rd party that is not a BSC Qualified HHDC)

BSC Qualified MOA

- A VLP should appoint a BSC Qualified MOA to install and maintain a CoP compliant Asset Metering System
- For Asset Meter Types 4 (limited to Whole Current only) and 5 where the VLP may elect to provide these services themselves (or via a 3rd party that is not a BSC Qualified MOA)

STRUCTURE OF NEW D-FLOW

New ‘Asset Metering System Half Hourly Metered Data’ Data Flow (1 of 4)

New ‘Asset Metering System Half Hourly Metered Data’ data flow

– contains ‘MPAN Core’ Group and Data Item with amended definition, new ‘Period Asset Metering System Metered Data’ Data Item & new ‘AMSID Core’ Data Item as Alias of ‘MPAN Core’

Group	Group Description	Range	Condition	L1	L2	L3	L4	L5	L6	L7	L8	Item Name
XXXX	Settlement Date	1		G								
					1							Settlement Date
YYYY	MPAN Core	1-*			G							
						1						MPAN Core
						1						Measurement Quantity ID
ZZZZ	Settlement Period Metering System Metered Data	46,48,50				G						
							1					Settlement Period Id
							1					Actual / Estimated Indicator
							1					Period Asset Metering System Metered Data

New ‘Asset Metering System Half Hourly Metered Data’ Data Item (2 of 4)

Amended definition of J0003 ‘MPAN Core’ Data Item included in ‘Asset Metering System Half Hourly Metered Data’

Item Name:	MPAN Core
Item Reference:	J0003
Item Ownership:	MRA
Item Description:	The unique national reference for a Metering System or Asset Metering System. First two digits - Valid Distributor identifier Next 10 digits - Unique number to the Distributor Last digit - Check digit generation is defined in (MOD 11)
Units:	None
Valid Set:	Obtained from/allocated by the appropriate Distribution Business or the SVAA for Asset Metering Systems.
Validation:	1-2; Valid Distribution Business identifier (as defined for each Distributor Market Participant Role in MDD). Note that MDD may reserve certain Distribution Business identifiers for non-Distributor purposes (including the allocation of Asset Metering System Identifiers by the SVAA) ~~(see data item [Distributor Id])~~ 3-12; Unique number (within Distribution Business or other allocating organisation) 13; Check digit
Domain:	Identifier
Logical Format:	INT(13)
Physical Length:	13
Has Synonyms:	'Metering System Id' (J0083) 'MSID' (J0421)
Has Aliases:	'BSPID' (J1284) 'GMSID (Generation Metering System Identification)' (J0975) 'Green Deal MPAN Core' (J1813) 'New GD MPAN Core' (J1814) 'Sequence MPAN Core' (J1261) ‘AMSID Core’ (Jyyyy)
Notes:	

New ‘Asset Metering System Half Hourly Metered Data data flow (3 of 4)

New ‘Period Asset Metering System Metered Data’ Data Item

Item Name:	Period Asset Metering System Metered Data
Item Reference:	Jxxxx
Item Ownership:	BSC
Item Description:	The Half Hour metered data for a Half Hourly Asset Metering System.
Units:	kWh
Valid Set:	Any number within the constraints of the format, may be positive or negative
Validation:	As Valid Set
Domain:	Consumer Energy
Logical Format:	[± NUM(9,1)]
Physical Length:	[11]
Has Synonyms:	
Has Aliases:	
Notes:	

New ‘Asset Metering System Half Hourly Metered Data data flow (4 of 4)

New ‘AMSID Core’ Data Item as Alias of J0003 ‘MPAN Core’

Item Name:	AMSID CORE
Item Reference:	Jyyyy
Item Ownership:	BSC
Item Description:	A unique identifier for an Asset Metering System. This is an alias of 'MPAN Core' (J0003). See 'MPAN Core' (J0003) for data item attributes.

The proposed new Data Flow and the related new and amended Data Items will be issued by MRASCo for industry consultation as SPF109 ‘New BSC data flow for P375’ following discussion at the MRASCo Development Board on 28 January.

OUTSTANDING QUESTIONS

P375 ‘VLP Hub’ – Questions (1 of 4)

1. When should HHDCs send HH AMSID Metered Data to SVAA?
   a) For II (if available) and SF
   b) For SF only (unless better data becomes available)
   c) All VARs
   d) When data becomes available
   e) Something else?

2. Should HHDCs send estimated HH AMSID Metered Data?:

   If ‘Yes’, when should estimation take place?
   a) For II
   b) For one of [R1 / R2 / R3 / RF]
   c) Something else?

   If ‘No’, should SVAA use defaulting where no data is received?

3. Should HHDCs follow HHDA SVA Settlement Calendar timescales?

P375 ‘VLP Hub’ – Questions (2 of 4)

4. There is a suite of P-flows for VLPs introduced for P344 for the exchange of MSID and MSID Pair data (P0278-P0286, P0288). Would VLPs prefer to:

- Amend “MSID” to “MSID / AMSID” and “MSID Pair” to “MSID Pair / AMSID Pair”; or
  - Do we need a flag to indicate MSID/AMSID?
- Create a new suite of P-flows for AMSIDs and AMSID Pairs based on the P344 suite

5. Should VLPs use the DTN to send / receive data flows or should it be optional?

6. How do VLPs want to receive HH AMSID Metered Data from HHDCs?

a) Daily, via the DTN (new D-flow); or
b) Weekly, via the DTN (new D-flow); or
c) Daily via a new P-flow equivalent of the new D-flow; or
d) Weekly, via a new P-flow equivalent of the new D-flow; or
e) Something else

P375 ‘VLP Hub’ – Questions (3 of 4)

7. Would HHDCs want to define a format and method of transmission for how they would receive data from the VLP where they retrieve data? For HH data and reads?

8. Would VLPs check that the HHDC had Protocol approval for an Asset Meter Type before appointing them?

9. Would HHMOAs be willing to have VLP’s install Asset Metering on the limited basis described in BSCP514 and submit information (e.g. MTDs) to HHMOA?

10. Would HHMOAs be willing to check existing Metering Systems installed for other purposes (e.g. for Capacity Market) for compliance with CoP11?

11. Should the VLP be the lead party referred to in BSCP502 and BSCP514 if they use a third party (other than a BSC Qualified HHDC or HHMOA) where they are either retrieving data from an Asset Meter or installing it?

P375 ‘VLP Hub’ – Questions (4 of 4)

QUESTIONS FOR ELEXON?

UPDATES TO BSCPs

ELEXON

BSCP502 – Half Hourly Data Collection for SVA Metering Systems Registered in SMRS

Scope of BSCP502 expanded to include Asset Metering Systems Registered with the SVAA

Section 2 reinstated for Interface and Timetable Information for Asset Metering Systems – based on Supplier Hub principles.

2.1 Registration Activities
- 2.1.1 New Asset Metering System
- 2.1.2 Change of VLP for an Existing Metering System (No Change of Agent)
- 2.1.3 Change of HHDC for an existing Asset Metering System
- 2.1.4 Change of MOA for an existing Asset Metering System (No change of Asset Metering System)
- 2.1.5 Concurrent Change of VLP and HHDC for an existing Asset Metering System

2.2 Metering Activities
- 2.2.1 Energise an Asset Metering System
- 2.2.2 De-Energise an Asset Metering System
- 2.2.3 Disconnection of an Asset Metering System following De-energisation
- 2.2.4 Change of Feeder Status – Energise Feeder for an Asset
- 2.2.5 Change of Feeder Status – De-Energise Feeder for an Asset
- 2.2.6 Reconfigure or Replace Asset Metering System

2.3 Collection Activities
- 2.3.1 HHDC collects, validates and sends consumption data for an Asset Metering System where Half Hourly data is not sourced by the VLP
- 2.3.2 HHDC receives Half Hourly data from the VLP, processes and sends consumption data for an Asset Metering System
- 2.3.3 HHDC / VLP investigates inconsistencies
- 2.3.4 Asset Metering System Investigation Process

2.4 Proving an Asset Metering System
- 2.4.1 Basic Proving Test
- 2.4.2 Complex Site Validation Test for an Asset Metering System

BSCP514 – SVA Meter Operations for Metering Systems Registered in SMRS

Scope of BSCP514 expanded to include Asset Metering Systems Registered with the SVAA

Section 4 reinstated for Interface and Timetable Information for Asset Metering Systems – based on Supplier Hub principles

4.1 Registration Activities

- 4.1.1 Change of HHMOA (No Change of Metering System or Change of VLP)
- 4.1.2 Installation of a New Asset Metering System
- 4.1.3 Commissioning of a New Asset Metering System
- 4.1.4 Using an Existing metering as an Asset Metering System
- 4.1.5 Change of HHDC for an existing Asset Metering System
- 4.1.6 Change of VLP for an Existing Metering System (No Change of Agent)
- 4.1.7 Concurrent Change of VLP and HHMOA (No change to Asset Metering System)

4.2 Metering Activities

- 4.2.1 Energise an Asset Metering System
- 4.2.2 De-energise an Asset Metering System
- 4.2.3 Removal of an Asset Metering System
- 4.2.4 Reconfigure or Replace an Asset Metering System
- 4.2.5 Change of Feeder Status – Energise Feeder for an Asset
- 4.2.6 Change of Feeder Status – De-Energise Feeder for an Asset

4.3 Meter Operation Activities for Asset Metering Systems

- 4.3.1 Asset Metering System Investigation Process

4.4 Proving an Asset Metering System

- 4.4.1 Basic Proving Test
- 4.4.2 Complex Site Validation Test for an Asset Metering System

4.1.4 is a new process to utilise a Metering System already installed for another purpose (for example a Capacity Market Bespoke Metering System) to be used as an Asset Metering System

Self Assessment Document (SAD) (BSCP537) – Qualification

Scope of SAD expanded to include Asset Metering Systems Registered with the SVAA

Sections 9, 13 and 19 expanded to include requirements for Asset Metering Systems.

9 HHDC

- 9.1A Business processes and mitigating controls – Asset Metering Systems
- 9.2A Exception Management - Asset Metering Systems

13 SVA HHMOA

- 13.1A Business processes and mitigating controls – Asset Metering Systems
- 13.2A Exception Management - Asset Metering Systems

19 Virtual Lead Party

- 19.1 Business processes and mitigating controls – General
- 19.1A Business processes and mitigating controls – Using Asset Metering Systems
- 19.1B Exception Management – Using Asset Metering Systems

Sections 19 includes the VLP responsibilities under the VLP Hub Principle (e.g. appointing Agents) and the options of the VLP:

1. acting as a data retriever and sending data to the HHDC; and
2. installing, commissioning, energizing and investigating faults for Asset Metering Systems that are Asset Metering Type 4 (Whole Current Asset Meters only) and for Asset Metering Type 5 (Asset Metering Types defined in Code of Practice 11)

BSCP27 – Technical Assurance of Half Hourly Metering Systems for Settlement Purposes

Scope of BSCP27 expanded to include Asset Metering Systems Registered with the SVAA

Section 3 updated to make the same techniques available to PAB for Asset Metering Systems as SVA Metering Systems.

3.1A	Main Sample Selection Process – Asset Metering Systems
3.2A	Desktop Audit Selection Process – Asset Metering Systems
3.3A	Specific Sample Selection Process – Asset Metering Systems Only
3.4A	Determination of Asset Metering Systems for Targeted Inspection Visits and Desktop Audits
3.5	Selection of Metering Systems or Asset Metering Systems for Re-inspections
3.6A	Inspection Visit – Asset Metering Systems
3.7A	Desktop Audit – Asset Metering Systems
3.8	Category 1, 2 and CDCC Non-Compliance
3.9	Queries

BSCP32 – Metering Dispensations

Scope of BSCP32 expanded to include Asset Metering Systems Registered with the SVAA

Section 3 updated to include Asset Metering Systems.

3.1 Application for Metering Dispensation (Site Specific, Generic)

3.3 Validation of Power Transformer and Cable/Line Loss Adjustments to be applied to a Metering System or Asset Metering System

BSCP602 – SVA Metering System & Asset Meter Register

Scope of BSCP602 expanded to include Asset Metering Systems Registered with the SVAA (AMSIDs)

Section 2 updated to include Asset Metering Systems.

2.1 MSID Pair / AMSID Pair Allocation Notification
2.2A MSID Pair / AMSID Pair Delivered Volume Notification by Virtual Lead Parties
2.3 Disputed MSID Pair / AMSID Pair Allocation Resolution
2.4 Register an Asset Metering System in the SVA Metering System & Asset Meter Register
2.5 Appointment of VLP Agents (MOA and HHDC) for an Asset Metering System

BSCP01 – Overview of Trading Arrangements

Scope of BSCP01 expanded to include Asset Metering Systems Registered with the SVAA (AMSIDs)

Section 3.3 Interim Information and Initial Volume Allocation / Settlement Runs to be updated to show HHDC sending AMSID Metered Data to SVAA.

Sections 4.1 Interim Information and Initial Settlement Timetable and Settlement Reports.

BSCP507 – Supplier Volume Allocation Standing Data Changes

Scope of BSCP507 expanded to include Asset Metering Systems Registered with the SVAA (AMSIDs)

Section 3 updated to include Asset Metering Systems.

3.1 Supplier / Supplier Agent and VLP / VLP Agent Standing Data Changes
3.6 MSID and AMSID Standing Data changes

BSCP508 – Supplier Volume Allocation Agent

Scope of BSCP508 expanded to include Asset Metering Systems Registered with the SVAA (AMSIDs)

Section 3 updated to include Asset Metering Systems.

3.2A Interim Information Volume Allocation Run for Settlement Day
3.2B Initial Volume Allocation Run for Settlement Day
3.13 Timetabled Reconciliation Run for Settlement Dates impacted by Demand Disconnection Events (3A Validate Stage 2 - Half Hourly MSID Data and AMSID Data)

P375 ‘VLP Hub’ – Amended D- and P- data flows

- Matrix of Supplier Hub D-flows for use by P375 solution

Participant\Data Flow	D0001	D0002	D0003	D0005	D0010	D0011	D0036	D0134	D0139	D0142	D0148	D0151	D0155	D0170	D0215	D0261	D0268	D0312	D0382	D0383	D0384
HHDC			x		x	x	x		x		x	x	x	x		x	x				
MOA	x	x	x	x	x			x	x	x	x	x	x		x				x	x	x
VLP	x	x	x		x	x		x	x	x	x	x	x	x	x	x	x	?	x	x	x
SVAA												x	x					?			

- Matrix of New and Amended P-flows for use by P375 solution

Participant\Data Flow	P0034	P0035	P0211	P0278	P0279	P0280	P0281	P0282	P0283	P0284	P0285	P0286	P0288	PXX1 (BSCP602)	PXXX (BSCP602)	New P-flow (BSCP502 2.1.1.6)	New P-flow (BSCP502 2.1.1.7)	New P-flow (BSCP502 2.3.3.1)	New P-flow (BSCP514 4.1.1.1)	New P-flow (BSCP514 4.1.4.10)	New P-flow (BSCP514 4.3.1.1)
HHDC	x	x														x	x	x			x
MOA			x																x	x	x
VLP			x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x
SVAA	x	x		x	x	x	x	x	x	x	x	x	x	x	x						

BSCP Updates – Next Steps

BSCP502

Update Appendices for Asset Metering:

- Data Validation
- Estimation
- Proving Test Requirements
- Complex Site Guidance

BSCP514

Update Appendices for Asset Metering:

- Sealing
- Key Asset Meter Technical Details
- Proving Test Requirements
- Complex Site Guidance
- Meter Operator Agent Service Levels

Finalise Data Flows references (DTN and P flows) in BSCP502, BSCP514 and SAD

NEXT STEPS

Next Steps

- Amend CSDs as per discussions
- Circulate for review
- Reconvene in early March

Action	Date
Industry Expert Group – Meeting 1	21 January 2021
Industry Expert Group – Meeting 2	1 – 12 March 2021
Industry Consultation on BSC Configurable Items	22 March – 9 April 2021
Industry Expert Group – Meeting 3 (Provisional)	19 – 23 April 2021
Present BSC Configurable Items to Panel	13 May 2021 or 8 July 2021

AOB

ELEXON

THANK YOU

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21 January 2021