

# ELEXION

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## **P375 – Industry Expert Group**

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

Meeting 2

3 March 2021

# Meeting Objectives and Agenda

Agenda Item	Lead
1. Introduction and Objectives	Elliott Harper (Chair)
2. Meeting 1 Summary and Action Updates	Craig Murray
3. Data Estimation	Iain Nicoll
4. Qualification and Registration	Sophie Bentley
5. Outstanding Questions	Workgroup
6. Assurance Process	George Player
7. BSCP Updates	Iain Nicoll
8. BSCP602 Walkthrough	Colin Berry
9. Next Steps	Craig Murray
10. AOB	Workgroup
11. Meeting Close	Elliott Harper

## Meeting Objectives:

- Agree VLP Hub solution, including registration, qualification and process where no Asset Meter volume data is received by SF run;
- Agree Code Subsidiary Document amendments and data flows for industry consultation; and
- Close any outstanding questions

# MEETING 1 SUMMARY AND ACTION UPDATES

# P375 IEG Meeting 1 Summary

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- Members agreed with the high level principles for the 'VLP Hub'
- Members considered all outstanding questions Elexon presented, agreeing on definitive answers for the majority
  - 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?
- Members agreed that the HHDC should submit the AMSID metered data as soon as it is available, otherwise by SF
  - Members agreed that a non-zero estimation method for undelivered data should be considered to act as a backstop if the above is not met
- Members considered the risk of domestic users of the P375 solution using prepayment Meters and considered the risk to be minimal and therefore did not think any specific provisions for prepayment Meters should be included, but noted this could be revisited in time

## P375 'VLP Hub' – High Level Principles (1 of 2)

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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)

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- 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 IEG Meeting 1 Action Updates

#	Action	Update
1	Amend new D-flow to allow volumes to be specified at Wh level	Completed
2	Develop non-zero estimation method for non-submitted AMSID data	Completed
3	Further amend CSDs per discussions, particularly the SAD, BSCP537 and BSCP602	Completed

# DATA ESTIMATION



## P375 Data Estimation (1 of 2)

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- SVA data estimation methods reviewed
  - 8 options for estimating import
  - 7 options for estimating export
- Asset Meter data estimation will only be performed by the HHDC
- HHDC submits estimated data or zero for SF run; where zero submitted HHDC can provide estimated data for a later Settlement run when information becomes available to provide an estimate
- Are any of the SVA methods suitable for P375?
  - Five methods proposed (same for Import and Export):
    - a) and b) swap main and check Asset Meter data where data from one is available
    - c) where one Settlement Period missing but Asset Meter cumulative register reading available the gap can be filled in.

## P375 Data Estimation (2 of 2)

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d) where the Asset Meter cumulative register available either:

- VLP or MOA provides operational data or additional information to be used in conjunction with Asset Meter readings; **OR**
- HHDC determines the Asset is predictable (e.g. always operates 16:30 to 17:30 on a week day) use the average of four weeks surrounding data in conjunction with Asset Meter readings
- **Should a limit on standard deviation be set around the average of four weeks surrounding data?**

e) where no Asset Meter cumulative register available:

- VLP or MOA provides operational data or additional information to be used by HHDC to construct profile;  
**AND**
- The operational or additional data provided to the HHDC must include evidence that overlaps actual data held by the HHDC that will be used as a validation check on the information submitted

# QUALIFICATION AND REGISTRATION

## P375 Qualification and Registration (1 of 2)

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- Two new roles created:
  - **Asset Metering MOA; and**
  - **Asset Metering HHDC.**
- AMMOAs and AMHHDCs must complete Generic Sections 1-7, and their role specific sections of the SAD (Section 9A and 13A).
- They will be subject to the same Qualification and re-Qualification processes as existing agent roles.
- AMMOAs and AMHHDCs will also be required to have a communications line in place and complete CVA Qualification for the relevant P-flows.
- Existing HHMOA and HHDC sections have been updated to include references to Asset Metering.
- All existing HHMOA and HHDCs will not be required to re-Qualify and can fulfil the Asset Metering role when P375 is introduced

**Should AMMOAs and AMHHDCs complete all Generic Sections of the SAD?**

## P375 Qualification and Registration (2 of 2)

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- Section 19 (VLP) of the SAD has been updated to include questions on Asset Metering.
- VLPs would be required to complete Section 7 of the SAD 'Initial Data Population and/or Data Migration' if they intend to use Asset Metering.
- VLPs are currently not required to complete re-Qualification before making any material changes to their staff, systems or processes.
- VLPs will register in MDD to have access to the DTN.

**Should existing VLPs have to complete Section 7 if they decide to use Asset Metering?**

# OUTSTANDING QUESTIONS

## P375 – Outstanding Questions

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**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?**

- The potential of creating an equivalent to standardise across all possible combinations of VLP and HHDC was discussed, and members agreed that this should be agreed in the next meeting

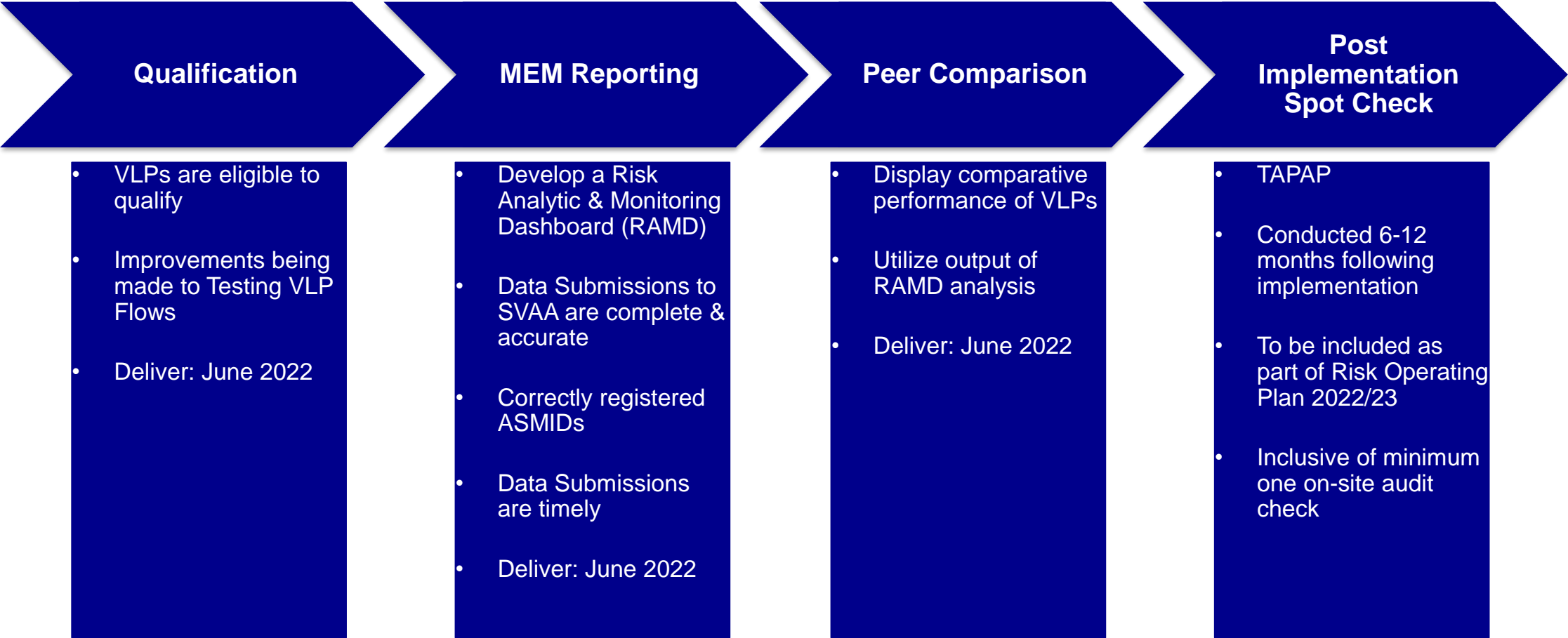
Elxon response: the VLP will need to send the HH AMSID Metered Data file to the HHDC in the “Dxxxx” format specified in the “DTC”, but without the DTC Header and Footer (the VLP & HHDC can agree what Header & Footer to use), so the HHDC will just need to add the DTC Header and Footer to the data file before issuing it to the SVAA

# QUESTIONS FOR ELEXON?



# ASSURANCE PROCESS

# Performance Assurance Techniques for P375



**Remedial PATs**

- Error and Failure Resolution
- Trading Disputes
- Change Mechanism
- Supplier Charges (?)



# UPDATES TO BSCP<sub>s</sub>

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

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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.

Updates: AMMOA and AMHHDC roles added; data to be submitted by SF; and data estimation, validation added to 2.3.1 following update of appendices

## 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

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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

Updates: AMMOA and AMHHDC roles added; removed option of an AMMOA using a HHMOA to have access to DTN

## 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

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

Sections 9 (HHDC), 13 (SVA HHMOA) and 19 (VLP) expanded to include requirements for Asset Metering Systems.

New sections 9A and 13A added for AMHHDC and AMMOA

## 9A HHDC

- 9A.1 Business processes and mitigating controls
- 9A.2 Exception Management
- 9A.3 Additional Information

## 13A SVA HHMOA

- 13A.1 Business processes and mitigating controls
- 13A.2 Exception Management
- 13A.3 Additional Information

Section 21.1 Appendix 1 Testing Requirements updated for:

- HHDC to send to data flow to SVAA
- VLP to use Asset Metering Systems (e.g. appointing agents etc.)

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

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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.

Updated to include AMMOA and AMHHDC roles

- 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

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



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

Section 2 updated to include Asset Metering Systems.

Updates: Sections 2.4, 2.5 and 3.7

- 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
- 3.1-3.6 SVAA Valida

New since IEG 1

- 2.6 Register Asset Meter Details for an Asset Metering System in the SVA Metering System & Asset Meter Register

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.

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## BSCP507 – Supplier Volume Allocation Standing Data Changes

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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

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						

### BSCP502

#### Updated Appendices for Asset Metering:

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

### BSCP514

#### Updated Appendices for Asset Metering:

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

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

# New 'Asset Metering System Metered Data' Dxxxx and related Data Items (1 / 4)

New 'Asset Metering System Half Hourly Metered Data' data flow "Dxxxx"

- 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

## Notes:

The J0003 'MPAN Core' Data Item in this Data Flow will only report 'AMSID' values, as defined by the Jyyyy 'AMSID Core' Data Item, which is an Alias of the J0003. The HHDC must send Period Asset Metering System Metered Data to the SVAA for all AMSIDs to which they have been appointed.

- This structure is unchanged since IEG1, but the "Notes" were not included previously.

## New 'Asset Metering System Metered Data' Dxxxx and related Data Items (2 / 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 <u>or Asset Metering System</u> . 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 <u>or the SVAA for Asset Metering Systems</u> .
Validation:	1-2; Valid Distribution Business identifier ( <u>as defined for each Distributor Market Participant Role in MDD</u> ). <u>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])</u> 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) <u>'AMSID Core' (Jyyyy)</u>
Notes:	

- This is unchanged since IEG1



# New ‘Asset Metering System Metered Data’ Dxxxx and related Data Items (3 / 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, <u>3</u> )]
Physical Length:	[11]
Has Synonyms:	
Has Aliases:	
Notes:	

- Logical Format changed from [± NUM(9,1)] to [± NUM(9,3)] to cater for Wh values

# New 'Asset Metering System Metered Data' Dxxxx and related Data Items (4 / 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.

- *This data item is unchanged since IEG1*

The proposed new Data Flow and the related new and amended Data Items were issued by MRASCo for industry consultation as SPF109 'New BSC data flow for P375' on 1 February following discussion at the MRASCo Development Board on 28 January.

# BSCP602 WALKTHROUGH

# BSCP602 – high-level changes for P375

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- Title - “SVA Metering System & Asset Meter Register”
- Section 1.1 “Purpose and Scope of the Procedure”:
  - Asset Metering Systems, AMSIDs & AMSID Pair Allocations
  - Associated MSID Pairs
  - AMSID Pair Delivered Volumes
- Section 2.1 MSID Pair Allocations
  - Amended process for allocations submitted via Self-Service Gateway
- Section 2.1A - AMSID Pair Allocation to a Secondary BM Unit
  - New section
- Section 2.2A - MSID Pair Delivered Volume Notification and AMSID Pair Delivered Volume Notification by Virtual Lead Parties
  - Amended to include AMSID Pairs
- Section 2.3 - Disputed MSID Pair Allocation or Disputed AMSID Pair Allocation Resolution
  - Amended to include AMSID Pairs
- Section 2.4- Register an Asset Metering System in the SVA Metering System & Asset Meter Register
  - New section

# BSCP602 – high-level changes for P375

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- Section 2.5 - Registration of VLP Agents for an Asset Metering System
  - New section
- Section 2.6 - Register Asset Meter Details for an Asset Metering System in the SVA Metering System & Asset Meter Register
  - New section
- 3.1 - 3.6 SVAA Validation & processing of MSID Pair Data
  - Updated for AMSID Pair Data
- 3.7 - Data required for the Registration of Asset Metering Systems
  - New section
- 3.8 - Definitions of Asset Metering and Asset Differencing
  - New section
- 3.9 - Valid combinations of 'MSID Pair Indicator' and 'AMSID Pair Asset Differencing Indicator' in a Secondary BM Unit
  - New section
- 3.10 - Shared use of MSID Pairs
  - New section
- 3.11 - Effect of AMSID Pair Allocations
  - New section

# NEXT STEPS

## Next Steps

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- Amend CSDs as per discussions, finalise all relevant CSDs for P375
- Circulate to industry for consultation
- Address any comments and present to the BSC Panel

Action	Date
Industry Expert Group – Meeting 1	21 January 2021
Industry Expert Group – Meeting 2	3 March 2021
Industry Consultation on BSC Configurable Items	29 March – 16 April 2021
Industry Expert Group – Meeting 3 (Provisional)	21 – 23 April 2021
Present BSC Configurable Items to Panel	13 May 2021 or 10 June 2021

AOB



# ELEXON

## THANK YOU

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**Craig Murray**

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3 March 2021