Linked and Related MPANs

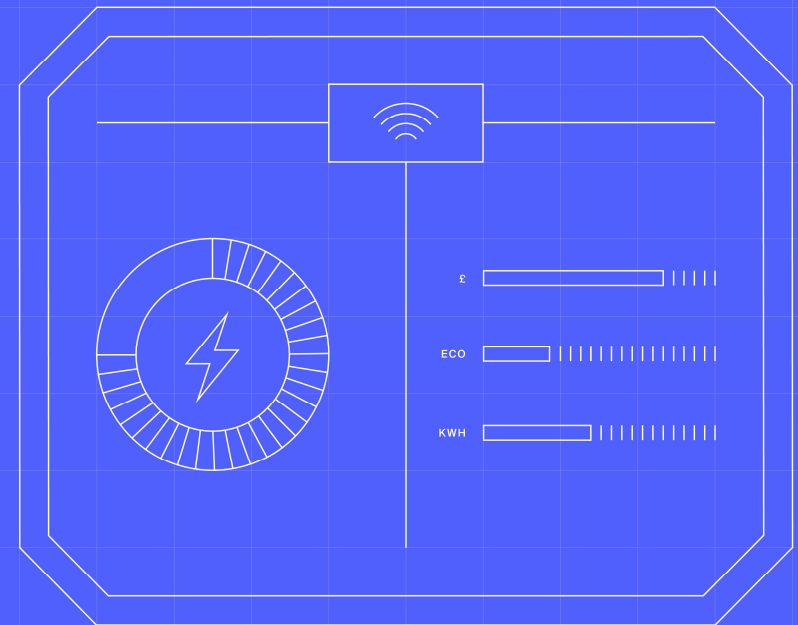MHHS PROGRAMME
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November 2023
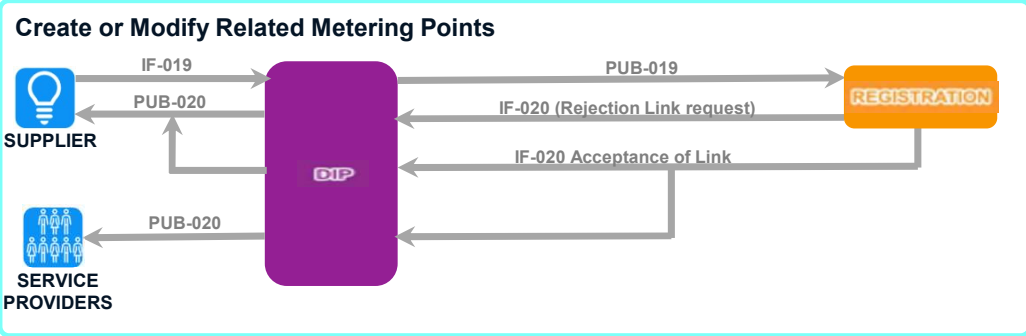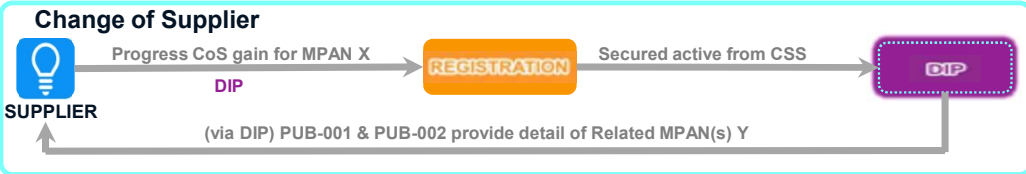
MHHS-DEL1058

Version 2.0

Contents

- Overview for Related and Linked MPANs

- Approach to appointing Service Providers

- Guidance on when to Link MPANs

- Interface variant breakdown

- Migration Design commentary

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RELATED MPANs Generally used to support premises with dedicated heating circuits

MPAN X - Measures all other load — Meter capable of measuring multiple circuits

MPAN(s) Y - Measures heating load — Or, meters measuring individual circuits

MPAN X is the Primary (Principle) MPAN – registration activity will automatically associate related MPAN(s) Y

SUPPLIER MPAN X & MPAN(s) Y — Single meter / Multiple meter(s) — **CONSUMER**

Change of Supplier

SUPPLIER — Progress CoS gain for MPAN X — DIP → REGISTRATION — Secured active from CSS → DIP

(via DIP) PUB-001 & PUB-002 provide detail of Related MPAN(s) Y

Create or Modify Related Metering Points

SUPPLIER — IF-019 / PUB-020 → DIP → PUB-019 / IF-020 (Rejection Link request) / IF-020 Acceptance of Link → REGISTRATION

SERVICE PROVIDERS — PUB-020

Appoint Service Providers

SUPPLIER — IF-031 Appointment for MPAN X — DIP → REGISTRATION — For each related MPAN IF-036 & IF-037 → DIP

Suppliers receive PUB-036 & PUB-037 for all Related MPANs – X & Y

NEW METER SERVICE — PUB-036 for each related MPAN – X & Y

NEW DATA SERVICE

Metering & Data Service Providers are the same for Related MPANs

OLD METER SERVICE — PUB-037 de-appointment for each related MPAN – X & Y

OLD DATA SERVICE

NETWORK — Network informed of Service Provider changes

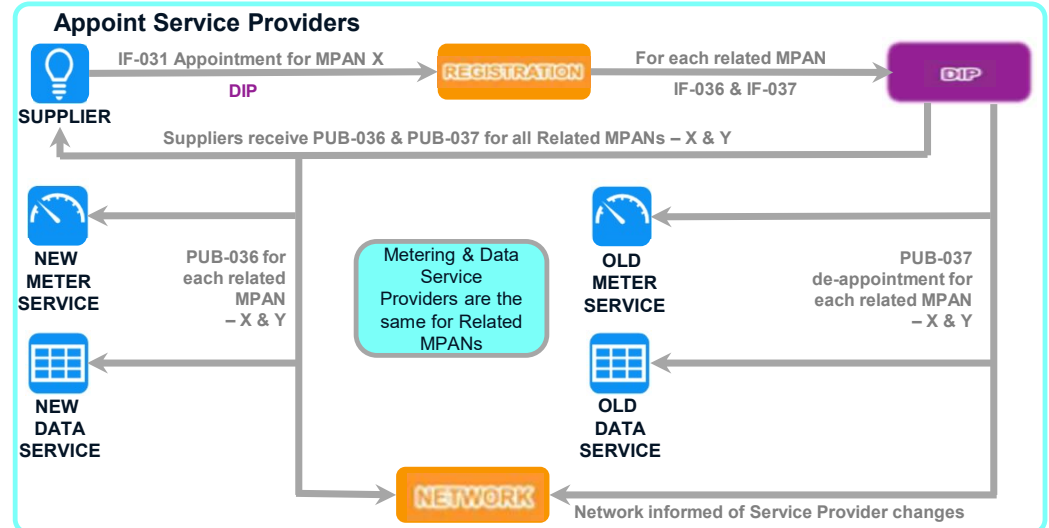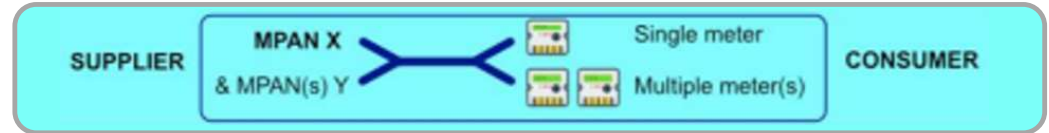Accepting appointment for MPAN X results in acceptance for related MPAN(s) Y

REC Schedule 28 'Related Metering Points'

Documents the procedures for Electricity Suppliers to create, maintain and end the relationship between two or more Related Metering Points. Related Metering Point relationships are maintained by Electricity Suppliers and notified to SMRS using DIP Interfaces, which is then mastered in the ERDS and notified to Central Switching Service (CSS).

An Electricity Supplier can create a Related Metering Point relationship between two or more *Import Metering Points* (i.e. not Export Metering Points) for which it is the Registered Supplier where:

(i)   all the Metering Points supply electricity to the same Consumer at the same Location (or at any part of the same Location);
(ii) the Meter Point Location Address and the Retail Energy Location Address are the same for each Metering Point; and
(iii) the appropriate Distribution Use of System Charge (DUoS) tariff, as set out within the DCUSA, is applicable following creation of the Related Metering Point relationship.

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Interface Guidance - Related

DIP Interface		Primary MPAN	Secondary MPAN(s)
IF-001	Notification of Change of Supplier	Registration Service →	Registration Service →
		→Incoming Supplier	→Incoming Supplier
		→Marketwide Data Service	→Marketwide Data Service
		→LDSO	→LDSO
IF-002	Notification to New Supplier of Site Information	Registration Service →	Registration Service →
		→Incoming Supplier	→Incoming Supplier
IF-019	Manage Meterpoint Relationships	Supplier →	
		→Registration Service	
IF-020	Manage Meterpoint Relationships Response	Registration Service →	
		→Supplier	
		→Data Service	
		→Metering Service	
		→LDSO	
		→EES	

Key

Output flow to the DIP →	
→ Input flow from the DIP	

Merged cells across Primary and Secondary mean only one instance of that message is sent, with both primary and secondary MPANs present in the one message.

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Interface Guidance - Related

DIP Interface		Primary MPAN	Secondary MPAN(s)
IF-031	Supplier Service Provider Appointment Request	Supplier →	Appointments will only be accepted for Primary MPANs in a related group
		→Registration Service	
IF-032	Supplier Service Provider Appointment Request Response	Registration Service →	
		→Supplier	
IF-033	Registration Service Request for Service Appointment	Registration Service →	
		→Data Service	
		→Metering Service	
IF-034	Service Provider Appointment Request Response	Data Service →	Appointments will only be accepted for Primary MPANs in a related group. If a MS/DS accepts an appointment for Primary MPAN, it results in acceptance for Secondary MPAN(s)
		Metering Service →	
		→Registration Service	
IF-035	Registration Service Appointment Status Notification	Registration Service →	
		→Supplier	
		→Metering Service	
		→Data Service	
IF-036	Service Provider Notification of Appointment	Registration Service →	Registration Service →
		→Supplier	→Supplier
		→Data Service	→Data Service
		→Metering Service	→Metering Service
		→LDSO	→LDSO
		→Marketwide Data Service	→Marketwide Data Service
		→EES	→EES
IF-037	Notification of Service De-Appointment	Registration Service →	Registration Service →
		→Supplier	→Supplier
		→Data Service	→Data Service
		→Metering Service	→Metering Service
		→LDSO	→LDSO
		→Marketwide Data Service	→Marketwide Data Service
		→EES	→EES

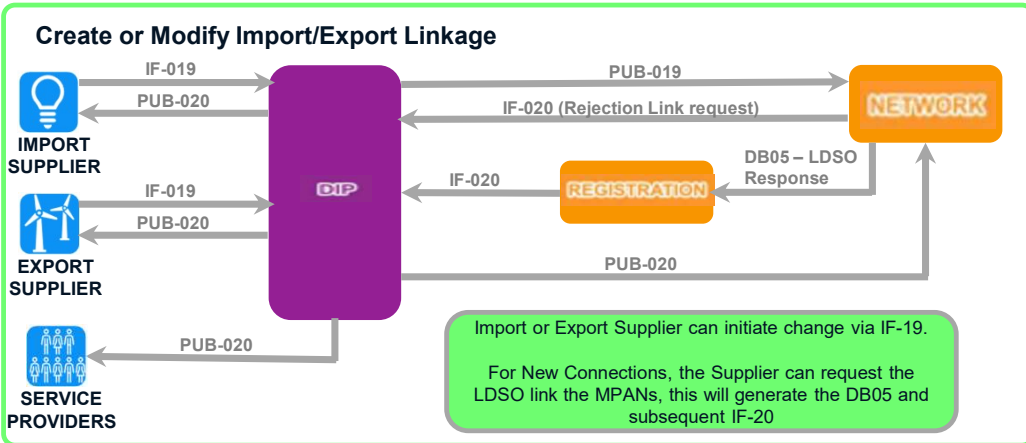**MHHS PROGRAMME**
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Key

Output flow to the DIP →
→ Input flow from the DIP

Merged cells across Primary and Secondary mean only one instance of that message is sent, with both primary and secondary MPANs present in the one message.

LINKED MPANs Used to support premises generating electricity for export

MPAN(s) A - Import (consumption) Meter capable of measuring import & export

MPAN(s) B - Export (generation) Or, separate meters*

SUPPLIER P MPAN X Single meter

SUPPLIER Q & MPAN(s) Y Multiple meter(s)* CONSUMER

MPAN A is the Import MPAN. MPAN B is the Export MPAN(s)

Change of Supplier

IMPORT SUPPLIER — Progress CoS gain for MPAN A — DIP — REGISTRATION — Secured active from CSS — DIP

(via DIP) PUB-001 & PUB-002 provide detail of Export MPAN(s) B

EXPORT SUPPLIER — Progress CoS gain for MPAN B — DIP — REGISTRATION — Secured active from CSS — DIP

(via DIP) PUB-001 & PUB-002 provide detail of Export MPAN(s) A

Create or Modify Import/Export Linkage

IMPORT SUPPLIER — IF-019 / PUB-020 — DIP — PUB-019 — NETWORK

IF-020 (Rejection Link request)

DB05 – LDSO Response

EXPORT SUPPLIER — IF-019 / PUB-020 — IF-020 — REGISTRATION

PUB-020

SERVICE PROVIDERS — PUB-020

Import or Export Supplier can initiate change via IF-19.

For New Connections, the Supplier can request the LDSO link the MPANs, this will generate the DB05 and subsequent IF-20

Linked MPAN Notes

Networks (LDSO) will maintain details of Linked MPANs in accordance with BSC rules and Supplier requests *

'Principle' and 'Subsidiary' are used interchangeably in the design alongside 'Primary' and 'Secondary' to acknowledge there may be multiple linked export and/or import MPANs (i.e. more than 2)

MPAN X is the Primary (Principle) MPAN – registration activity will automatically associate linked MPAN(s) Y

Where multiple export (subsidiary) MPANs are being specified, a failure for any MPAN in the request will result in the transaction failing. It may be more efficient to process subsidiary MPANs as individual transactions.

Normally a linked MPAN arrangement would consist of a single 'Import' (Principle) MPAN and a single 'Export' (Subsidiary) MPAN. However, it is possible that more than one Export MPAN may be linked to a single Import MPAN.

Linked MPANs are managed by CSS independently and may be registered to the same or different suppliers. However, the Registration Service will seek to align Service Providers automatically, except in the case of Smart DS

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* **- Simplified Linking rules for MHHS Design provided on slide 8**

Appoint Service Providers – Linked MPANs
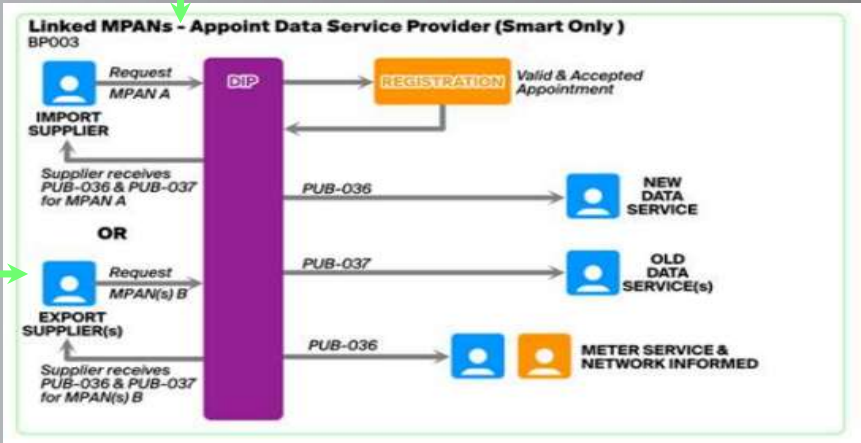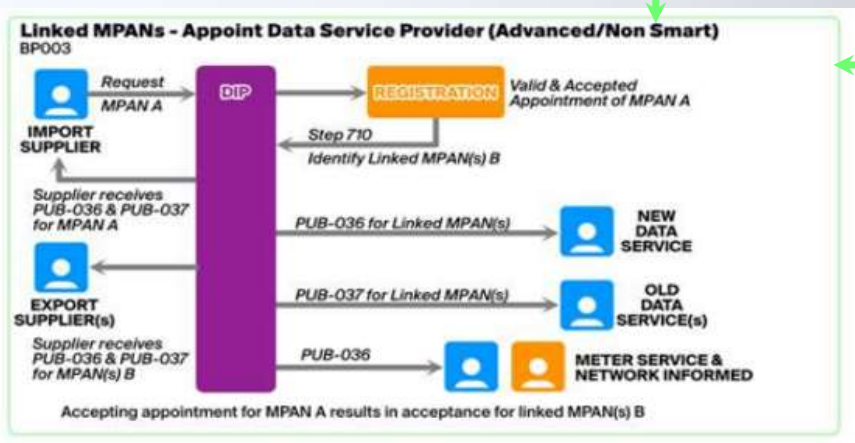
Non-Smart

Smart

For all linked MPANs, the Metering Service and Data Service will be common

Except for Data Service provider for Smart Meters, which can be different
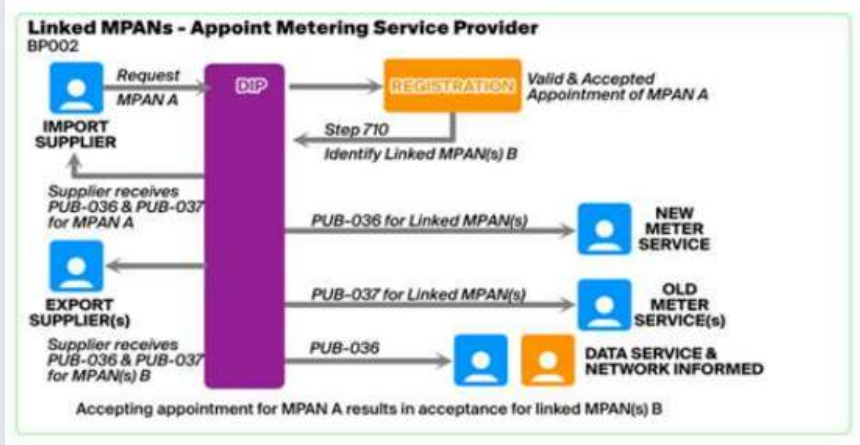
Appointments will only be accepted for 'Import' (Principle) MPANs in a linked group

Except Smart Data Service

Linked MPANs - Appoint Data Service Provider (Advanced/Non Smart)
BP003

Linked MPANs - Appoint Data Service Provider (Smart Only)
BP003

For a Metering Service or ADS/UMSDS they will only receive an IF-033 for the Import MPAN (with the details of the Export MPANs included). They are effectively accepting the appointment to any export MPANs by accepting the Import MPAN using the IF-034. They will just receive one IF-035. However, they will receive an individual IF-036 to confirm each MPAN has been appointed.

Linked MPANs - Appoint Metering Service Provider
BP002

For a Smart Data Service, they will receive an IF-033 for both the Import and Export MPAN (assuming they are being appointed to both) and will accept both individually with an IF-034.
In this case they would also receive a separate IF-035.

For Consideration
Contractual implications for Metering Service (and Data Service for Non-Smart) for linked export MPANs where there are different import/export suppliers

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Linking Guidance

The MHHS Design introduces functionality for 'auto-alignment' of Appointments for 'linked' Metering Systems. These cover three broad categories of Metering Systems (Related MPAN noted in slide 3) where there is a requirement for at least one, and in some cases both, of the appointed agents to be aligned across the Metering Systems within that Relationship or Association as per the below requirements:
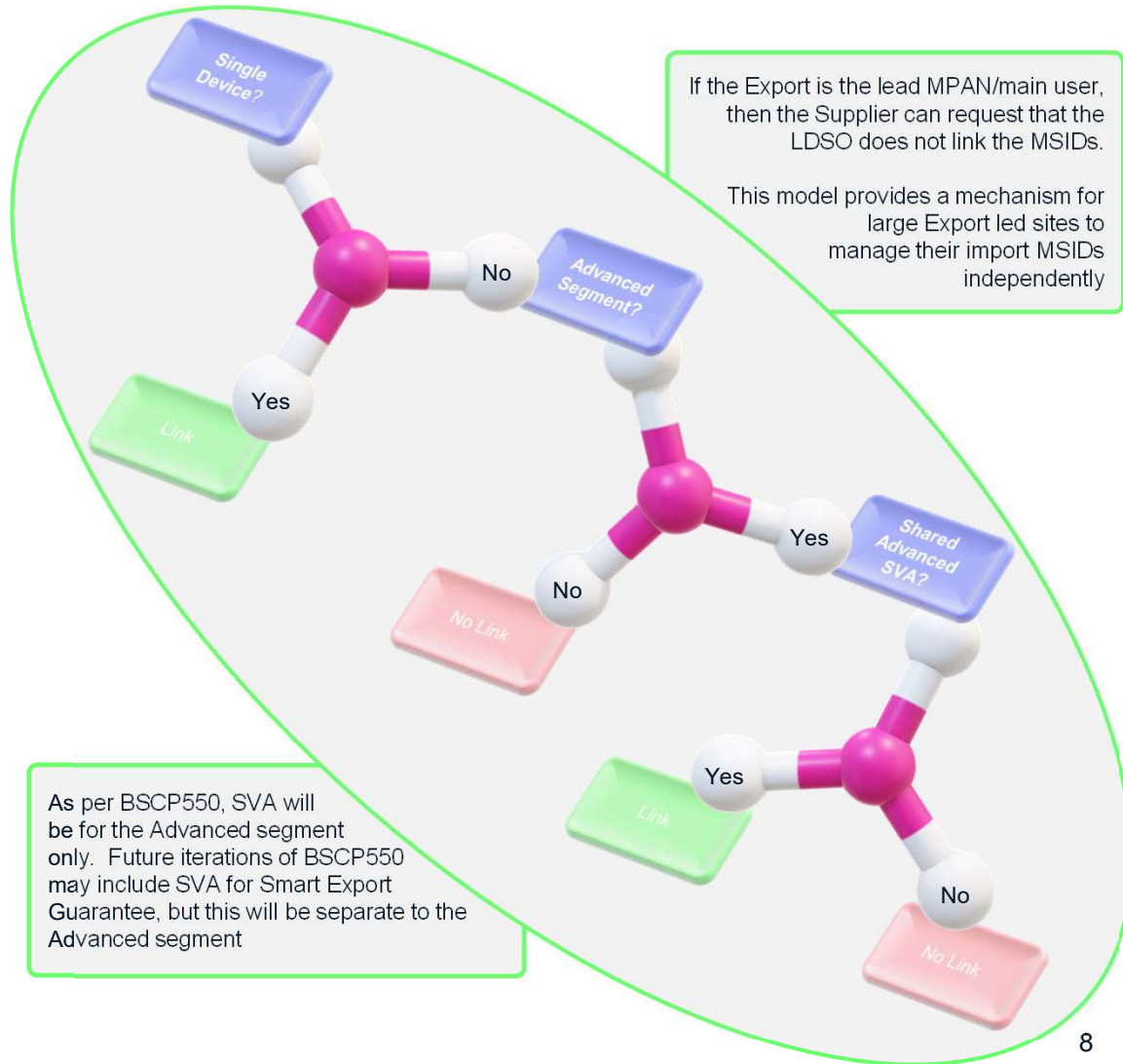
BSCP550 'Shared Advanced SVA Meter Arrangement of Half Hourly Import and Export Active Energy'
Defines the additional processes and responsibilities involved where one or more Suppliers receive Active Energy through the same Shared SVA Metering System, referred to as Shared SVA Meter Arrangement.

The Smart Export Guarantee (SEG)
Ensures that small-scale low-carbon generators receive payment for any electricity they export to the grid. The scheme requires licensed electricity suppliers to offer export tariffs to anaerobic digestion (AD), hydro, onshore wind, and solar photovoltaic (PV) generators with a total installed capacity up to 5MW, and micro-combined heat and power (micro-CHP) with a capacity of 50kW or less. The obligation came into force on 1 January 2020. It follows on from the Feed-in Tariff (FIT) scheme that closed on 31 March 2019.

The meter used to measure the export is typically a smart meter capable of measuring export at half-hourly intervals. The meter must have an associated export MPAN and be registered under the BSC. It is the responsibility of SEG licensees to ensure that the generator is set up with an Export MPAN that associates with their meter.

If the Export is the lead MPAN/main user, then the Supplier can request that the LDSO does not link the MSIDs.

This model provides a mechanism for large Export led sites to manage their import MSIDs independently

As per BSCP550, SVA will be for the Advanced segment only. Future iterations of BSCP550 may include SVA for Smart Export Guarantee, but this will be separate to the Advanced segment

Interface Guidance - Linked

DIP Interface		Import MPAN	Export MPAN(s)
IF-001	Notification of Change of Supplier	Registration Service →	Registration Service →
		→Incoming Supplier	→Incoming Supplier
		→Marketwide Data Service	→Marketwide Data Service
	As per the routing logic, SUPL will receive a copy of the other Import/Export Supplier flow	→LDSO	→LDSO
IF-002	Notification to New Supplier of Site Information	Registration Service →	Registration Service →
		→Incoming Supplier	→Incoming Supplier
IF-019	Manage Meterpoint Relationships	Import or Export Supplier →	
		→LDSO	
IF-020	Manage Meterpoint Relationships Response	Registration Service →	
		LDSO →	
		→Supplier	
		→Data Service	
		→Metering Service	
		→LDSO	
	As per the routing logic, SUPL will receive a copy of the other Import/Export Supplier flow	→EES	

Key

Output flow to the DIP →	Merged cells across Import and Export mean only one instance of that message is sent, with both import and export MPANs present in the one message.
→ Input flow from the DIP	

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Interface Guidance – Linked (BAU ONLY)

DIP Interface		For appointments involving MSS/MSA/UMSO & ADS/UMSDS		For appointments involving SDS	
		Import MPAN	Export MPAN(s)	Import MPAN	Export MPAN(s)
IF-031	Supplier Service Provider Appointment Request	Supplier → / →Registration Service	Appointments will only be accepted for "Import" (Principle) MPANs in a linked group - except SDS. Accepting appointment for Import results in acceptance for linked Export(s).	Supplier → / →Registration Service	Supplier → / →Registration Service
IF-032	Supplier Service Provider Appointment Request Response	Registration Service → / →Supplier		Registration Service → / →Supplier	Registration Service → / →Supplier
IF-033	Registration Service Request for Service Appointment	Registration Service → / →Data Service / →Metering Service		Registration Service → / →Data Service	Registration Service → / →Data Service
IF-034	Service Provider Appointment Request Response	Metering Service → / Data Service → / →Registration Service	Appointments will only be accepted for "Import" (Principle) MPANs in a linked group - except SDS. Accepting appointment for Import results in acceptance for linked Export(s).	Data Service → / →Registration Service	Data Service → / →Registration Service
IF-035	Registration Service Appointment Status Notification	Registration Service → / →Supplier / →Data Service / →Metering Service		Registration Service → / →Supplier / →Data Service	Registration Service → / →Supplier / →Data Service
IF-036	Service Provider Notification of Appointment	Registration Service → / →Supplier / →Data Service / →Metering Service / →LDSO / →Marketwide Data Service / →EES	Registration Service → / →Supplier / →Data Service / →Metering Service / →LDSO / →Marketwide Data Service / →EES	Registration Service → / →Supplier / →Data Service / →Metering Service / →LDSO / →Marketwide Data Service / →EES	Registration Service → / →Supplier / →Data Service / →Metering Service / →LDSO / →Marketwide Data Service / →EES
	As per the routing logic, SUPL will receive a copy of the other Import/Export Supplier flow				
IF-037	Notification of Service De-Appointment	Registration Service → / →Supplier / →Data Service / →Metering Service / →LDSO / →Marketwide Data Service / →EES	Registration Service → / →Supplier / →Data Service / →Metering Service / →LDSO / →Marketwide Data Service / →EES	Registration Service → / →Supplier / →Data Service / →Metering Service / →LDSO / →Marketwide Data Service / →EES	Registration Service → / →Supplier / →Data Service / →Metering Service / →LDSO / →Marketwide Data Service / →EES

Output flow to the DIP →
→ Input flow from the DIP

Merged cells across Import and Export mean only one instance of that message is sent, with both import and export MPANs present in the one message.

Interface Guidance – Linked (MIGRATION ONLY)

DIP Interface		For appointments involving MSS/MSA/UMSO & ADS/UMSDS		For appointments involving SDS	
		Import MPAN	Export MPAN(s)	Import MPAN	Export MPAN(s)
IF-031	Supplier Service Provider Appointment Request MIGRATION ONLY	Supplier →	Supplier →	Supplier →	Supplier →
		→Registration Service	→Registration Service	→Registration Service	→Registration Service
IF-032	Supplier Service Provider Appointment Request Response MIGRATION ONLY	Registration Service →	Registration Service →	Registration Service →	Registration Service →
		→Supplier	→Supplier	→Supplier	→Supplier
IF-033	Registration Service Request for Service Appointment MIGRATION ONLY	Registration Service →	Registration Service →	Registration Service →	Registration Service →
		→Data Service	→Data Service	→Data Service	→Data Service
		→Metering Service	→Metering Service		
IF-034	Service Provider Appointment Request Response MIGRATION ONLY	Metering Service →	Metering Service →	Data Service →	Data Service →
		Data Service →	Data Service →	→Registration Service	→Registration Service
		→Registration Service	→Registration Service		
IF-035	Registration Service Appointment Status Notification MIGRATION ONLY	Registration Service →	Registration Service →	Registration Service →	Registration Service →
		→Supplier	→Supplier	→Supplier	→Supplier
		→Data Service	→Data Service	→Data Service	→Data Service
		→Metering Service	→Metering Service		

Key

Output flow to the DIP →	Merged cells across Import and Export mean only one instance of that message is sent, with both import and export MPANs present in the one message.
→ Input flow from the DIP	

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11

Migration Design

Related MPANs

The BAU MHHS Design (as explained on the previous slides) **is** utilised to support the migration of Related MPANs

The migration of a Related MPAN group will be initiated by a Supplier sending an IF-031 for the Primary MPAN only

When the migration of the Primary MPAN successfully completes (denoted by the sending of an IF-36) the Registration Service will also send an IF-036 for the Secondary MPANs.

Like the BAU MHHS Design this will occur for the appointment of all Metering and Data Services for each MPAN in the related group.

Import/Export (Linked)

The BAU MHHS Design (as explained on the previous slides) **will not** be utilised to support the migration of Import/Export MPANs

The BAU MHHS Design rules for Import / Export (e.g. Advanced Metering/Data Services and Smart Metering Services) will not become effective until all MPANs within an Import/Export group have been migrated to the MHHS arrangements

Import / Export MPANs will be migrated via the sending of separate IF-31s

Once all MPANs in a group have migrated the Registration Service will then begin to apply the BAU rules, which could result in the Registration Service automatically aligning the appointments

Suppliers will continue to have code obligations which require the same organisations to be appointed. However, when MPANs exist in both MHHS and Legacy arrangements this could be the same organisation operating MHHS and Legacy roles (i.e. MEM and MS).