End-to-End Walkthrough III MPAN Ownership

16th August 2022

Version 1 SC/EP MHHS Design Team

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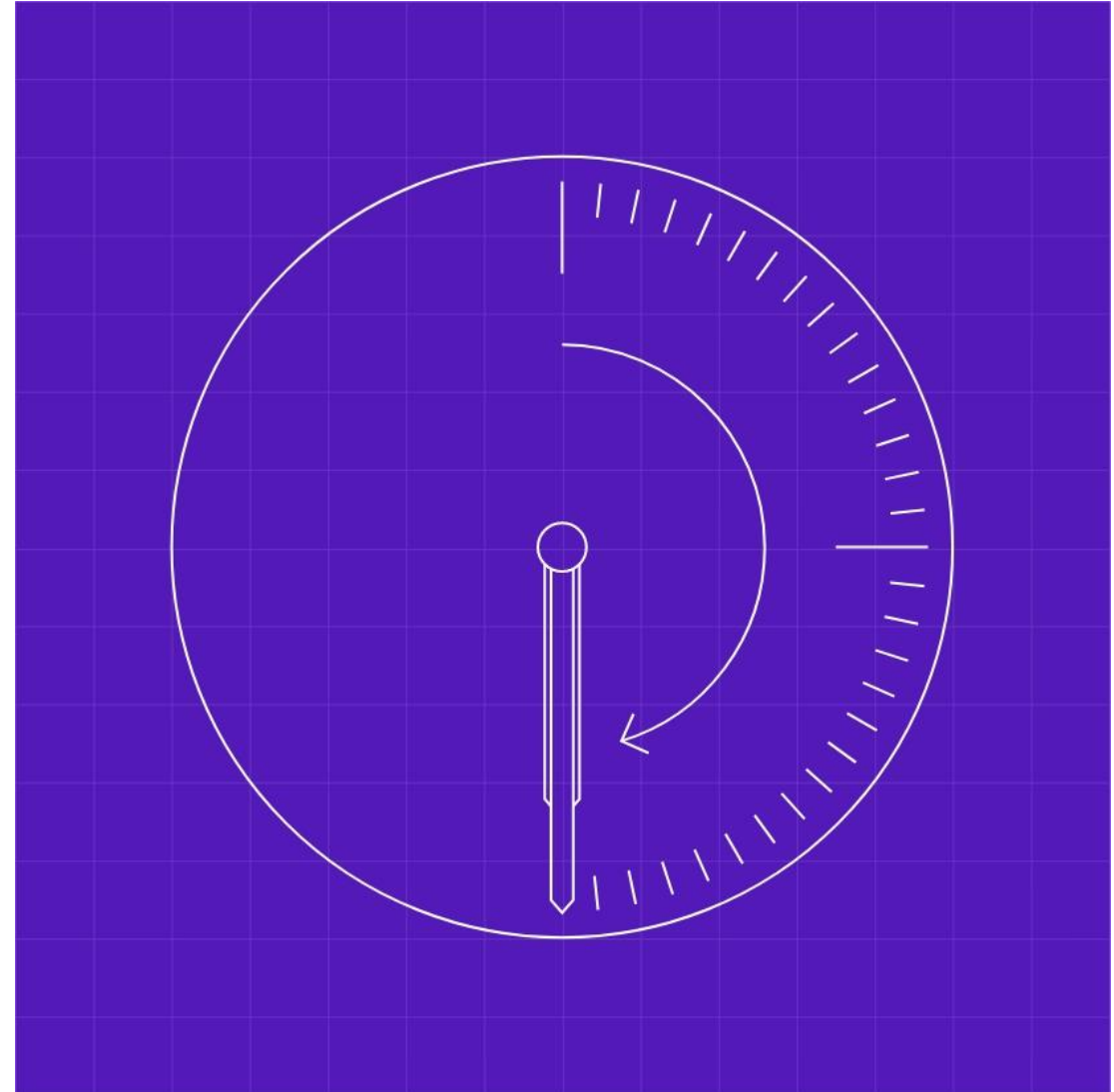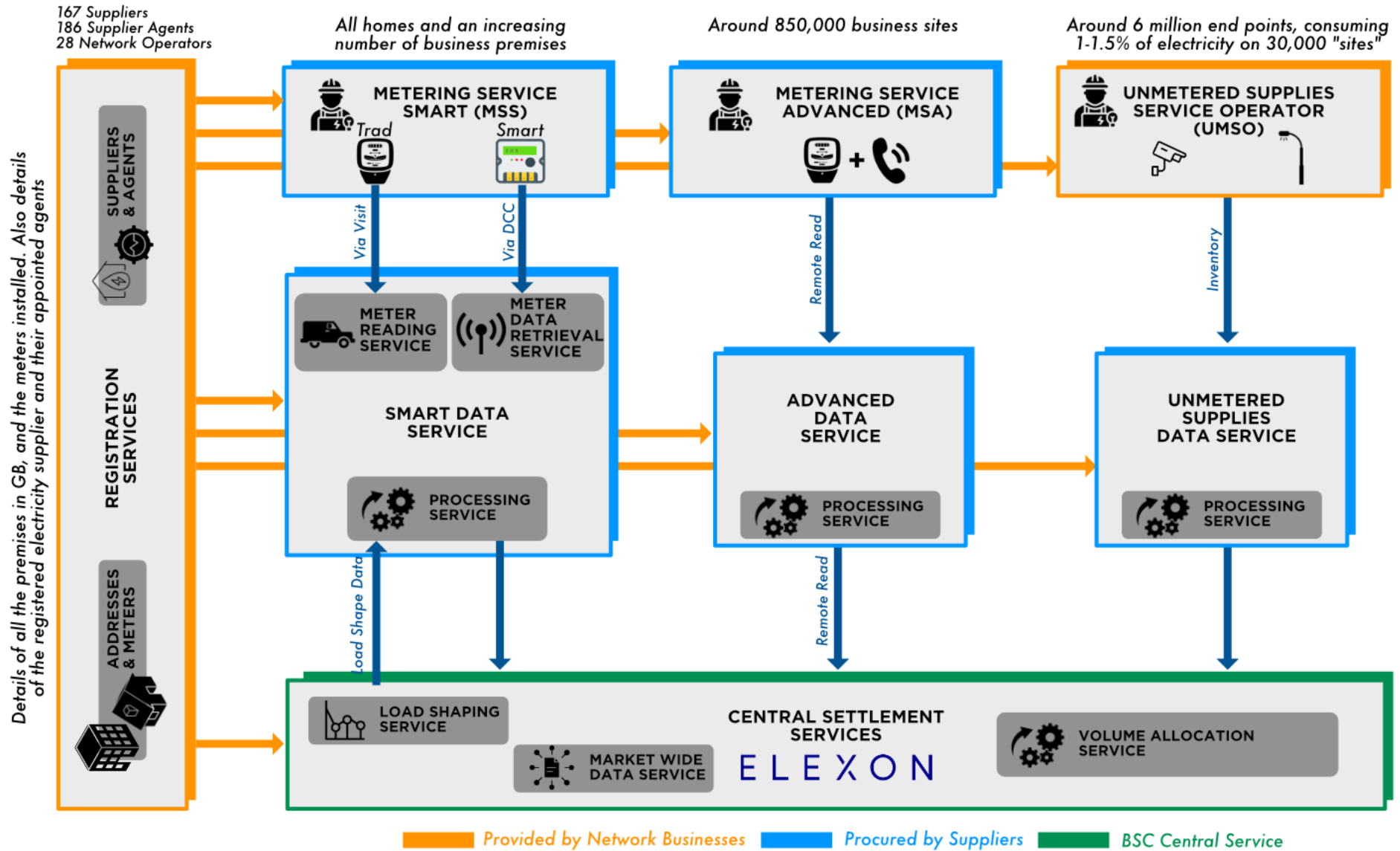Any questions?

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- TOM – Role of Registration Service

- Change of Supplier

- New Connections

- Change of Service Provider
  - Appointments
  - Update to CSS/DCC
  - Changes to Appointments

- Linked MPANs
  - Related MPANs
  - Linked Import/Export MPANs

- Exchange of Readings (following COS)

- Supplier Updates to Registration

- Headline Changes / Context

- Business Process Overview

- Slido Questions

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MHHSP - Interface & Publication List

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MHHSP Interface ID	Interface Name	Description	Sender	Always (Role)	Primary Recipient (Only Sender Knows)	Secondary Recipient (MPAN Look Up / Optionality)	Business Processes
					These cols require further review as part of Physical Design & ECS Data Reqs & Obfuscation		
DIP-COMMON	DIP COMMON Blocks	Message Header Information	DIP				
MHHSP-IF-001	Notification of Change of Supplier	Notification of Change of Supplier	Registration Service	MDS	Supplier (Incoming)	N/A	BP001 - COS
MHHSP-IF-002	Registration Update to Supplier (COS Gain)	Notification to New Supplier of Site Information	Registration Service	N/A	N/A	Supplier	BP002 - COS
MHHSP-IF-003	Central Systesm - MPAN Creation & Update	Central Systesm - MPAN Creation & Update					
MHHSP-IF-005	Metering Service MTD Updates to Registration	To notify the Registration Service of Metering related Data Item changes, for example, New install, Removal, MEX, change to existing Meter Details	MSS, MSA	Registration	N/A	N/A	BP09 - Change of Meter
MHHSP-IF-006	Registration Service Notification of MTD Updates	Outcome of Metering Service Request to Update Registration after Install, Removal, MEX or Updates to Existing Meter	Registration Service	N/A	XOver MS, DS, Supplier	MS, DS, Supplier, LDSO	BP09 - Change of Meter
MHHSP-IF-007	Change of Energisation Status Outcome	Metering Service Notification of Outcome of Energisation Status to Registration	MSS, AMS. LDSO	Registration Service	N/A	N/A	BP008 - Chg En Status
MHHSP-IF-008	Registration Service Notification of Change of Energisation Status	Registration Service notification of Change of Energisation Status [back to] MS & other parties	Registration Service	Central Systems	XOver MS, DS, Supplier	MS, DS, Supplier, LDSO	BP008 - Chg En Status
MHHSP-IF-009	Registration Service Notification of Disconnection	Registration Notification of Disconnection	Registration Service	Central Systems	XOver MS, DS, Supplier	MS, DS, Supplier, LDSO	BP07 - Disconnection
MHHSP-IF-013	MDS Defaults Applied	Still to be discussed by ECSWG	Central Settlements	N/A	N/A	Supplier	BP05 - Data Processing
MHHSP-IF-015	Request Historic Consumption	Request Consumption History Back	ADS (Gain)	DIP	N/A	N/A	BP008

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MHHS INTERFACE / MESSAGE SPECIFICATION

Interface Name:	Notification of Change of Supplier
Interface / Pub ID:	IF-001 / PUB-001
Version Number:	v0.1

DIP Delivery Pattern	Pattern A (JSON via DIP)
Security Category:	Cat 2
Business Process Docs	BP01

From Parties: Registration Service (REGS)

To Parties: Suppliers, Marketwide Data Service (MDS)

Purpose / Description: Following a successful Change of Supplier CSS will notify this to the Registration Service. This is the interface that will be used by the Registration Service to notify, interested, MHHS Participants that a successful Change of Supplier has taken place.

Routing Rules

Event Code(s) / Conditions	Always Routing	Primary Routing	Secondary Routing	Correlation ID Required
[ChangeOfSupplier]	MDS	SUPPI - Incoming Supplier	N/A	

Message Structure

MHHSP Data Item ID	Data Item	Description	Item Owner	MHHSP Data Type Ref	Data Type	Schema Optionality	C/M/O	Conditionality Rule	Obfescation	Population Notes
S0- Transactional Info (Mandatory)										
DI-000	Interface Id	Interface Id	Sending Party		String 6	M	M			IF-001
DI-999	Event Code	Code used to identify the nature of the Event	Sending Party	DT-004	String~50	M	M			[ChangeOfSupplier]
S1 - Sender Info (Mandatory)										
D0- Transactional Info - DIP Set (Added by DIP - Mandatory)										
A0 - Addressing (Optional for non-Primary Routing)										
Z0 - Interface Signature (Mandatory)										
Z1 - Publication Signature (Added by DIP - Mandatory)										
M0 - MPAN										
DI-063	MPAN Core	A business key used to uniquely identify the metering point that is the subject of the update.	Sending Party	DT-002	String~13	M	M			
		The market-wide unique								

JSON Example

```
[
  {
    "payload": {
      "CommonBlock": {
        "S0": {
          "interfaceId": "IF-XXX",
          "eventCode": "[EventType]"
        },
        "S1": {
          "environment": "PROD",
          "schemaVersion": "0.0.1",
          "senderUniqueRef": "string",
          "senderEnvelopeRef": "string",
          "sentTimestamp": "2022-03-01T13:00:00+00:00",
          "senderId": "10090123456",
          "senderEZName": "Very Long Named Energy Co (Metering) Ltd",
          "senderRole": "10090123456",
          "agentId": "10090123456"
        },
        "A0": {
          "primaryRecipient": [
            "10090123456"
          ],
          "secondaryRecipient": [
            "10090123456"
          ],
          "always": [
            "101",
            "10090123456"
          ]
        },
        "D0": {
          "correlationId": "CI-BP09-20220401-1234567890123",
          "transactionId": "T-006-1234567890123-106-20220401-1234CC",
          "transactionTimestamp": "string",
          "publicationId": "string"
        },
      }
    }
  }
]
```

https://mhhsprogramme.sharepoint.com/:v:/r/sites/Market-wideHalfHourlySettlement/Meeting%20Papers/MHHS%20DES184%20Registration%20Sub%20Group%2021%20July%202022%20Meeting%20Recording%20v1.0.mp4?csf=1&web=1

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Change of Supplier

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- CSS manages the Change of Supplier process – sending switch status updates to the Registration Service (ERDS/ERDA)

- On acceptance of a 'switch request' Registration Service will issue – IF-002/PUB-002 to the supplier – this contains metering information' to allow Supplier to perform 'Service Provider Determination' (D0217 equivalent) .

- Existing REC Change Request (R0040) – to change Registration Service Updates – expectation is that solution will be inline with current MHHS Design – review once CR is concluded

- CSS will update the Registration Service (Switch Status = SecuredActive)

- Registration Service then notifies MHHS Parties of the Change of Supplier (IF-001 / PUB-001)

  - Incoming Supplier (to confirm Settlements & DIP are aware of the switch)
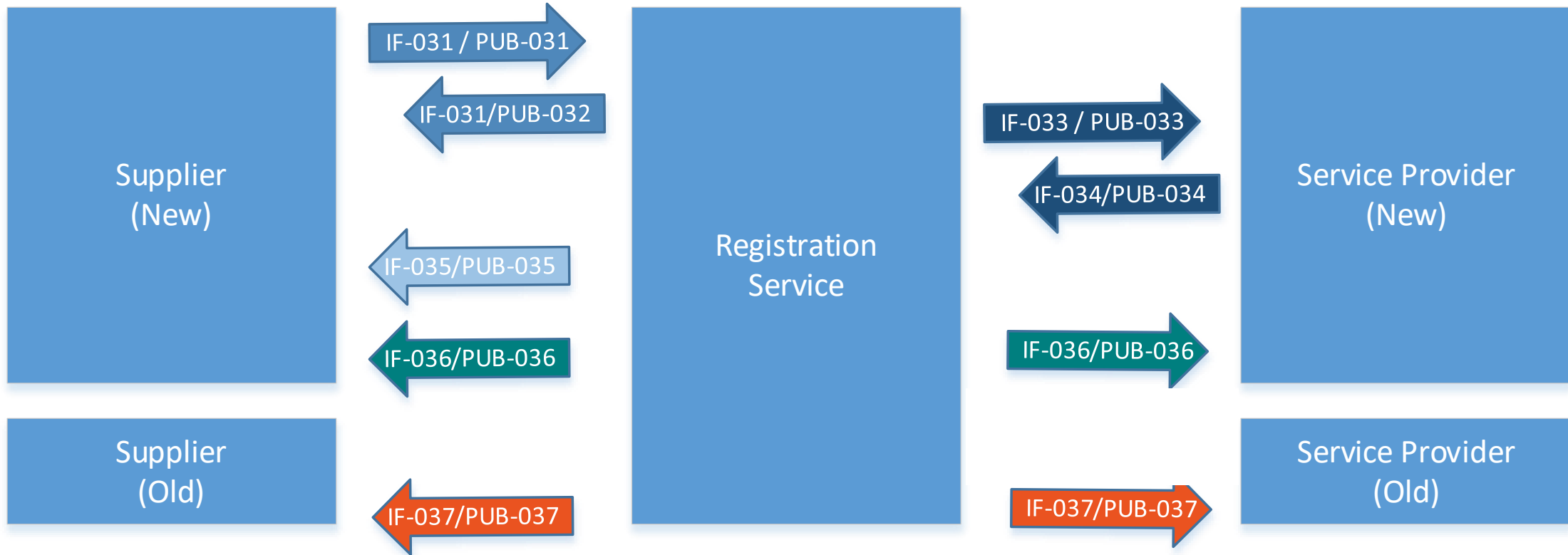
  - Elexon Central Settlements systems

  - LDSO

New Connections

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- Largely the same process as today / Change of Supplier

- MPAN creation is managed via LDSO / CSS

    - Key Characteristics of the MPAN set at creation by the LDSO
    - Energy Direction
    - Linked MPANs
    - Connection Type / Segment

- MPAN undergoes 'initial' registration via CSS – triggered by the Supplier

- Supplier initiates Service Provider Appointments

- Additional activity e.g. Site Works / Metering Activity (Metering Design Playback → Friday 19th August 10am)

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Change of Service Provider

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- Initiated by the Supplier, but 'brokered' by the Registration Service, Service Providers still choose to Accept or Reject an appointment

- Expectation is that Supplier will initiate Service Provider Appointments alongside switch request or end of objection period

- However, process allows for on-the-day and retrospective appointment of a Service Provider, if required

- Registration Service will have functionality to :

  - Ensure Service Provider is appropriate for the MPAN (i.e. Connection Type & Market Segment)
  - Special logic to manage 'Change of Connection Type / Market Segment' scenarios (BP-011A & B)
  - Prevent 'gaps' in Service Provider appointment for any given supply period
  - Manage the 'queue' of prospective appointments – auto-expire / 'Lapse' appointments that cannot be successfully matched to a completed Switch Request
  - Issue 'Reminder Notifications' to Suppliers where No Service Appointments are in place or data is misaligned (BP-011C)

- De-Appointment is now completely automated and managed by the Registration Service, off the back off Change of Supplier / Service Provider Appointment or Disconnection

- Suppliers must now send a "Metering Service Appointment" for UMS MPANs (not required under current process)

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Happy Path MS Service Provider Appointment

Registration Service Update to DCC

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- Following successful appointment of a Service Provider, Registration Service will update CSS/DCC

- This update will be ustilising the *existing* ERDA interfaces ~ Registration → CSS → DCC

- Still subject to ongoing REC Change (R0044) – detailed design around improved error handling & outcome responses

- Some Data Service participants have asked about a possible MHHS interface (IF-035/PUB-035) message to advise when DCC updates has completed – the usefulness of such an update will be dependent on the outcome of the REC Change Detailed Design

-

Changes to an Existing Service Appointment / Request

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- There is no Appointment Cancellation mechanism with the MHHS Design per se

- In situations where Service Provider Appointment(s) are made [by a supplier] and accepted [by a Service Provider], but for whatever reason (Customer Cancellation, Objection, etc.) the MPAN does not transfer to that Supplier; the Registration Service will _automatically_ cancel or 'Lapse' any appointment requests it cannot match with a successful 'SecuredActive' notification from CSS.

- Both the Supplier and impacted Service Provider will be notified of this occurrence via PUB-035 (Ref BP002/BP003). Where required, the Supplier would need to submit a new Service Appointment Request in line with the SDD of any new/follow-on Switch Request.

- In cases where the Supplier wishes to change characteristics of an _already accepted appointment_ prior to it becoming active (Gate Closure SSD-1), they may simply resubmit a second appointment request with those details amended.

- When processing appointments in order to make them active, the Registration Service will use the most recently sent [by the supplier] and accepted [by the Service provider] appointment and 'lapse' all previous requests.

- Any changes required post activation of the Appointment would need to follow the ' Change of Existing Service Provider' process BP003B.

  - Only an IF-035/PUB-035 will be issued – to confirm or reject the update request
  - No new IF-036/PUB will be issued !

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Linked or Grouped MPANs

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- MHHS Design contains new Service Provider 'Auto-Alignment' functionality for 'Linked MPANs'

- Two types of Linked MPAN:

  - Related MPANs (D0386 – possible CR to move onto the DIP)
  - Linked Import & Export MPANs (Maintained via LDSO – possible SDEP Query)

- It will only be possible for suppliers to initiate Service Provider Appointments on

  - Primary MPAN
  - Linked Import MPAN

- Service Providers will be notified of the linked MPANs as part of the initial appointment request – accepting this request will be considered acceptance for all!

- On successful completion of Service Provider Appointment on principle MPAN – all remaining linked MPANs will 'automatically align' and transfer to the same Service Provider(s)

- An IF-036/PUB-036 message will be issued for each MPAN

Break ?

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Exchange of Readings following a COS

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- For the vast majority of Smart Meters there has to be the expectation that *all parties* will have access to *actual data from the meter* and the default position is to use that actual data recovered

- Sharing of Reading Data is to allow parties to validate (if they choose) their own recovered actual data; and in the case of missing actual data, provide visibility of this without the need to request it – this cannot in & of itself completely mitigate the need for either D0300 process or participant co-operation

- In the absence of the ability to recover actual data outgoing SDS will provide a Cumulative Estimate, outgoing Supplier will provide Estimate of (billing/tariff registers)

- Change of Supplier 'Customer Own Reads' used only for Traditional Meters

- MHHS Rule of Thumb for Meter Readings (across all processes)
    - Smart / Cumulative Reads = IF-041/PUB-041
    - Traditional /Register Reads = D0010

- Broadly speaking, existing D0300 process is used to resolve meter reading queries/issues
    - Supplier agree reading(s) with each other
    - Supplier notifies his own respective partner Data Service
    - Data Service is only instructed about an Agreed Read by his partner Supplier

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Supplier Updates into Registration Service

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- Suppliers are able to maintain the following data within the Registration Service:

  - Consent Granularity
  - IHD Information
  - DCC Enrolment Status
  - SMSO
  - SSC / Profile Class for Traditional Meters (requires further review by Design Team)

- Updates will be sent by Suppliers to the Registration Service using IF-025/PUB-025

- Registration Service will Accept or Reject Supplier's updates using IF-026/PUB-026

- Suppliers will also maintain "Domestic Premise Indicator" – However, this will be via CSS

  i.e. Supplier will maintain the value in CSS using CSS interfaces, updates will be passed into the Registration Service from CSS, before the Registration Service then issues the update out to MHHS Participants (IF-018/PUB-018)

Additional Resources

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- MPAN Ownership related documentation
  - https://mhhsprogramme.sharepoint.com/sites/Market-wideHalfHourlySettlement/SitePages/Design%20Artefacts%20by%20Business%20Process%20-%20MPAN%20Ownership.aspx

- MHHS Supporting Documentation (Requirements Documents – Registration Service, Suppliers)
  - https://mhhsprogramme.sharepoint.com/sites/Market-wideHalfHourlySettlement/SitePages/Design%20Artefacts%20by%20Business%20Process%20-%20Supporting%20Documents%20.aspx

- MHHS Interface High-level Overview (approx. 1hr)
  - https://mhhsprogramme.sharepoint.com/:v:/r/sites/Market-wideHalfHourlySettlement/Meeting%20Papers/MHHS%20DES184%20Registration%20Sub%20Group%2021%20July%202022%20Meeting%20Recording%20v1.0.mp4?csf=1&web=1

- Email Contact Points
  - Design@mhhsprogramme.co.uk
  - PPC@mhhsprogramme.co.uk

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Any questions?

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