



**MHHS
PROGRAMME**
Industry-led, Elexon facilitated

Design Overview

5 August 2022

MHHS-DEL560

Version 1 SI Design Assurance Team

Session Overview

Approach

- We will use the Design Overview sessions throughout the playback period to present the Programme's plans, progress, findings and themes
- We will focus on signposting for new Participants or Participants in need of a refresh to support their engagement with the Programme
- This will be across the overall Design, the Design Artefacts, and future Design Playback sessions

Purpose

- Today's session will introduce the MHHS Design, including Design Artefacts, the Working Groups, and Programme structure
- We will also outline how to engage with the process
- We will also respond to any questions, comments or queries you may have

Outcomes

- By the end of today's session, you will:
 - Understand the Design and TOM at a high-level
 - Have a familiarity with the artefacts, how they have been developed, and how you can engage with the process
 - Understand the structure of the Working Groups

Outputs

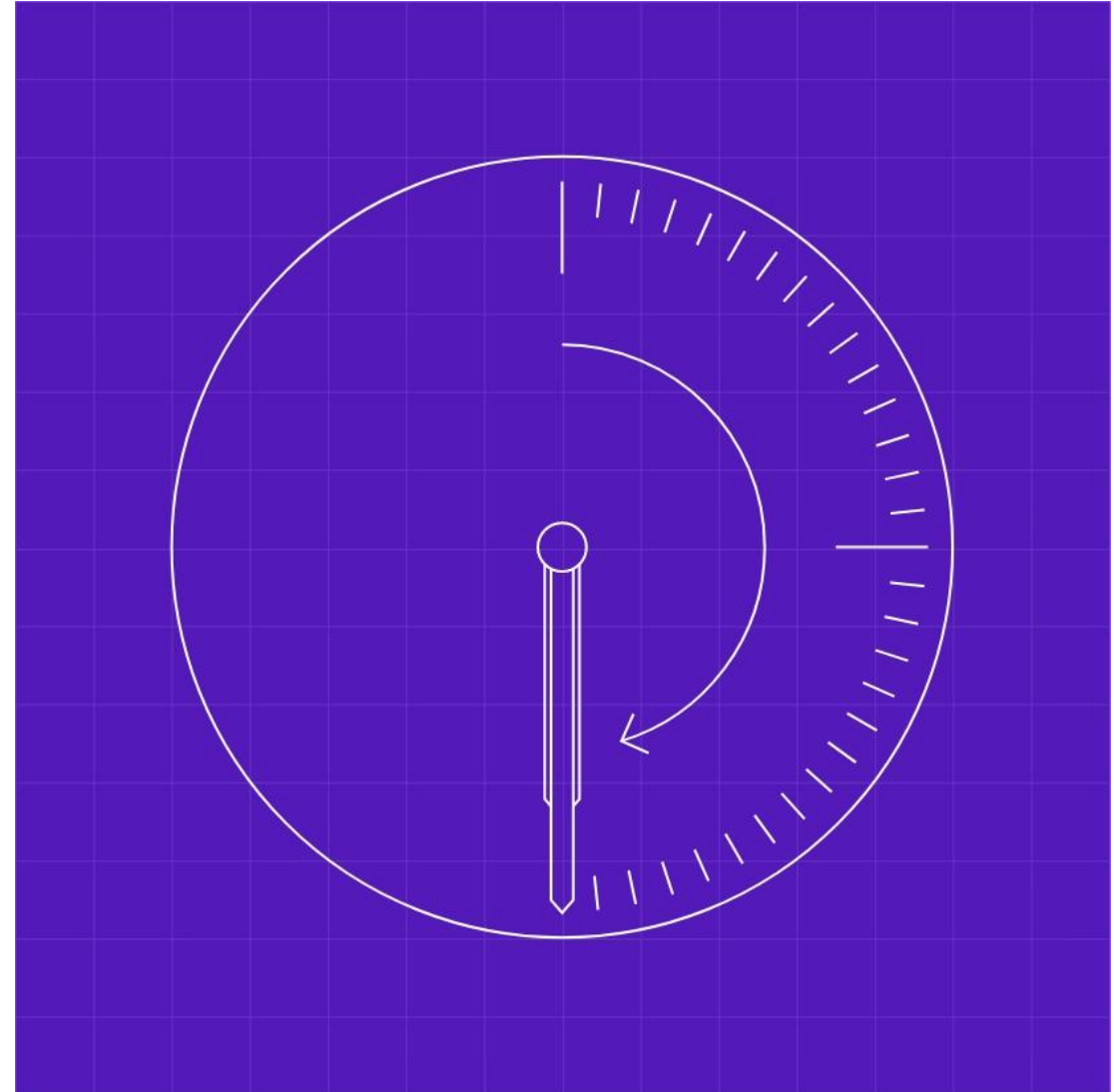
- We will issue the slide pack and a link to the recording for this session
- All questions submitted on Slido and asked in person will be logged and the answers transcribed and edited for comprehension
- These will also be issued to all attendees

Slido and Rules of Engagement

- Chat in Teams has been disabled
- Questions can be submitted at Slido.com with the code below
- These questions will be grouped into themes by the facilitator and answered in the dedicated time after the walkthrough

What We'll Cover Today

- Programme objectives and outcomes
- Current market design
- Developing the MHHS Design
- The MHHS Target Operating Model (TOM)
 - The new services
 - The Data Integration Platform
 - Illustrating the TOM
- Accessing the Design
 - Where to find the artefacts
 - Look and feel and coverage
 - The Programme Glossary
 - Design tooling
- Further Playback Sessions
- Slido Review



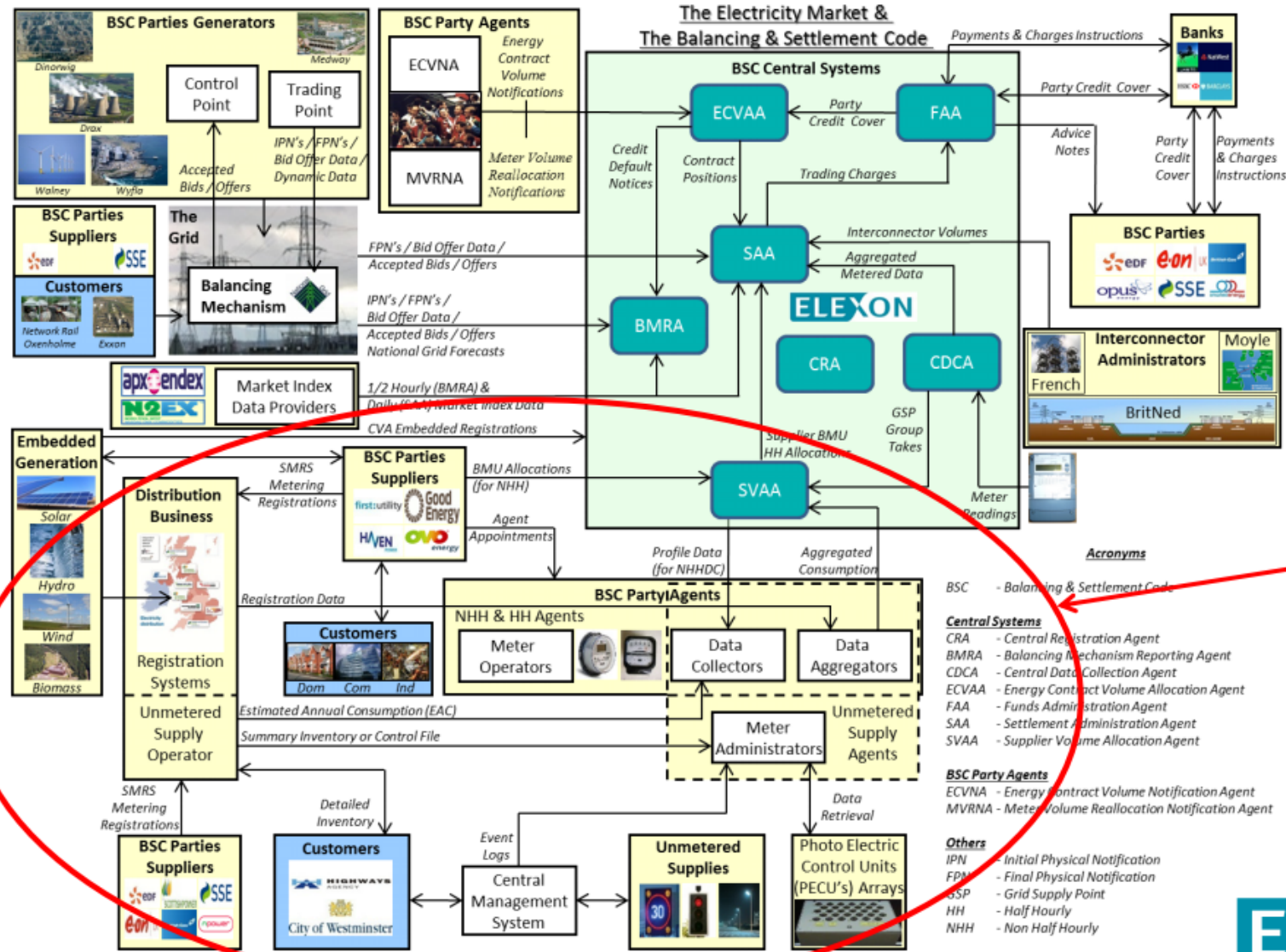
Headline Outcomes of the Programme

- Settlement accuracy improves
- Settlement finalised after 4 months, rather than 14 months
- Enables new products and services to support Net Zero
- Building block for more flexible and innovative energy system (electrification of heat, transport etc.)
- Benefit to GB consumers of £1.6 to £4.6bn

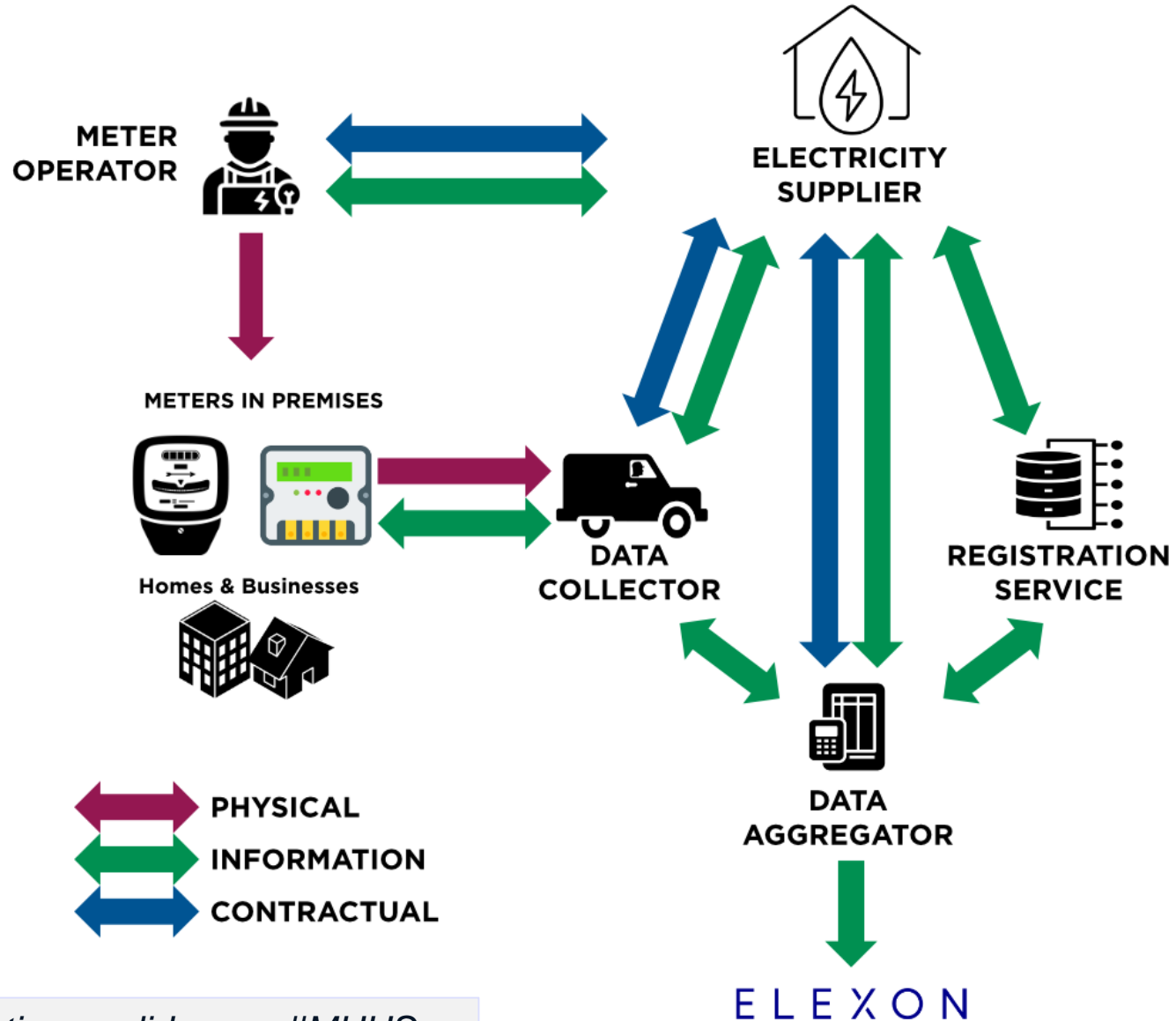
Technical Changes the Programme is Delivering or Assuring

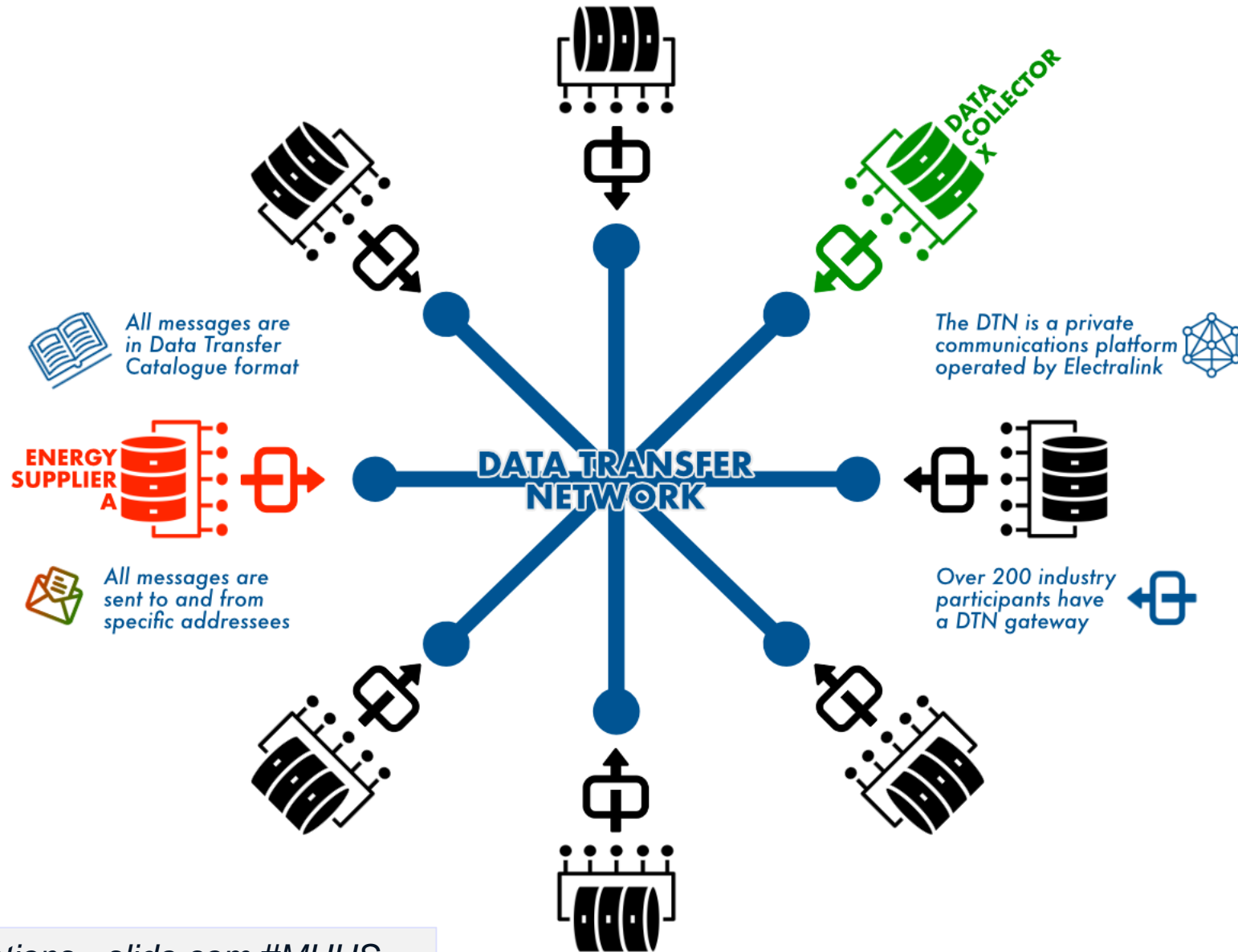
- 4 new Elexon systems
- Amending 9 Elexon existing systems
- Implementing a new underlying event driven architecture
- Changes to multiple industry codes and their supporting systems (e.g. Smart Energy Code & DCC)
- Helping industry participants understand how to interact with the new systems and evaluate the impact to their own solutions and processes

Current Market Design



MHHS SCOPE

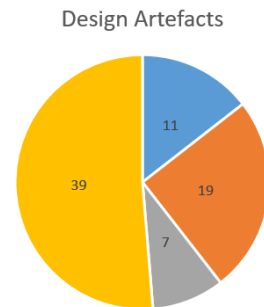
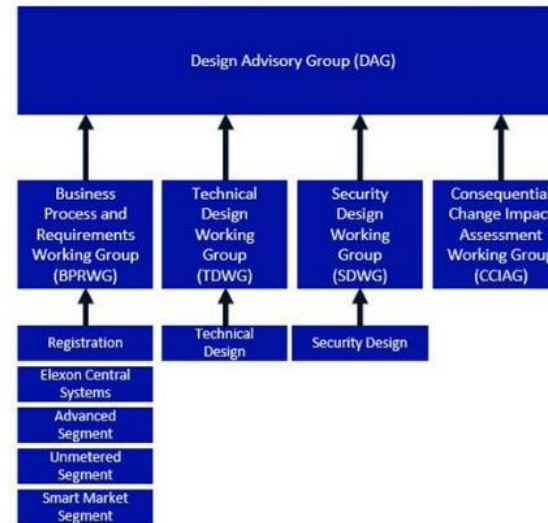
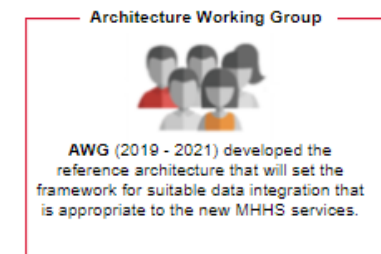
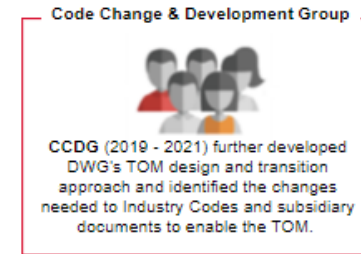




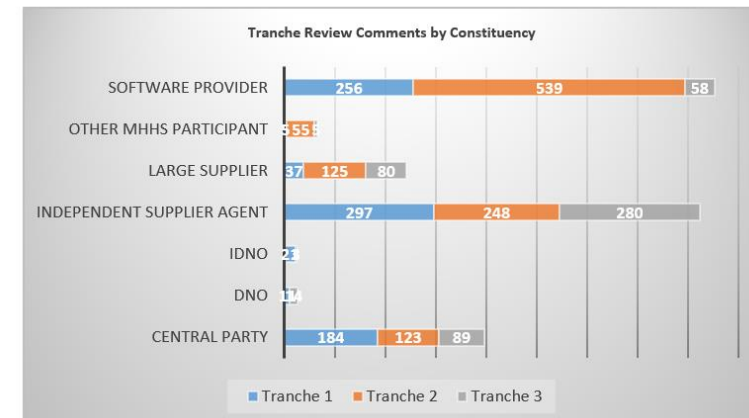
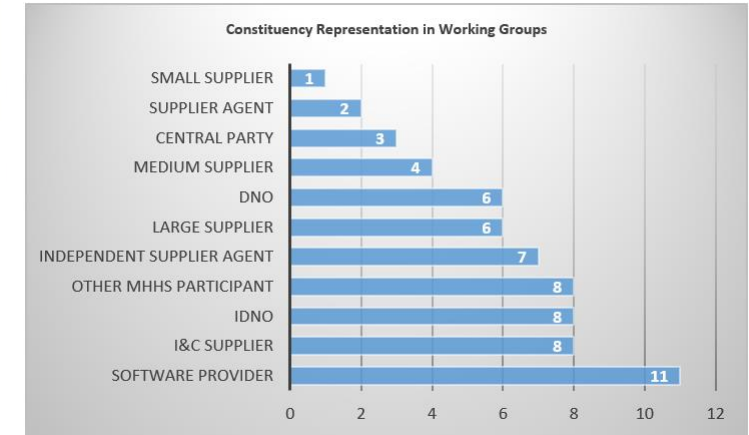
Developing the Design

Development of the MHHS Design

- Prior to the mobilisation of the MHHS Programme, an initial set of working documents were created by the existing industry working groups. These working documents formed the basis of the MHHS Design.
- The MHHS Programme established a number of cross industry Working Groups, responsible for further developing the detailed design and agreeing an integrated cross referenced set of Design Artefacts.
- Since November 2021 there have been **107** Working Group meetings regularly attended by representatives from **64** organisations, across all constituencies, who have contributed to over **200** hours of discussion and debate to agree the core elements of the design.
- **37** Design Artefacts have also been released for industry review in 3 tranches, receiving over **2000** comments from across **15** organisations, and subsequently being Conditionally Approved by the Design Advisory Group (DAG).



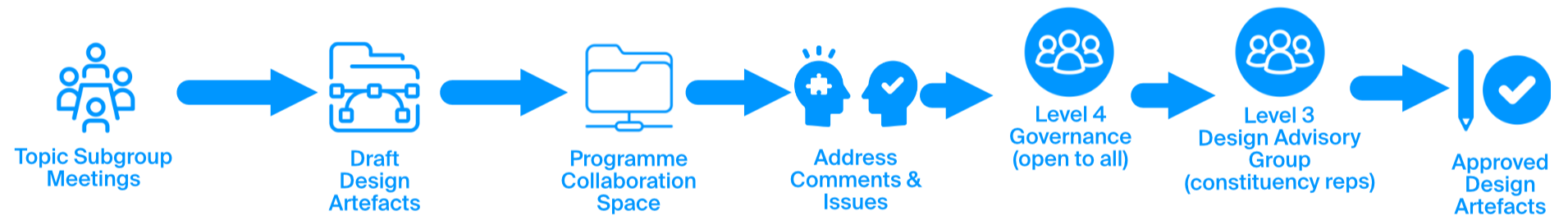
■ Tranche 1 ■ Tranche 2 ■ Tranche 3 ■ Tranche 4



MHHS Design Delivery Process

v0.2 05 Aug 2022 SJH

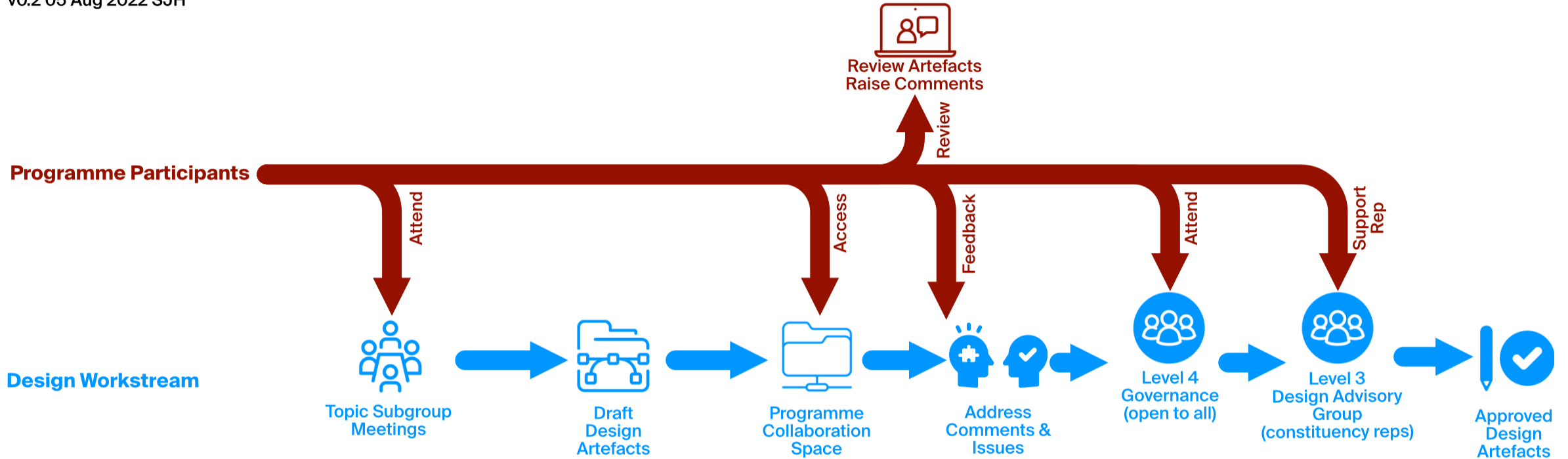
Design Workstream



Questions - [slido.com](https://www.slido.com) #MHHS

MHHS Design Delivery Process

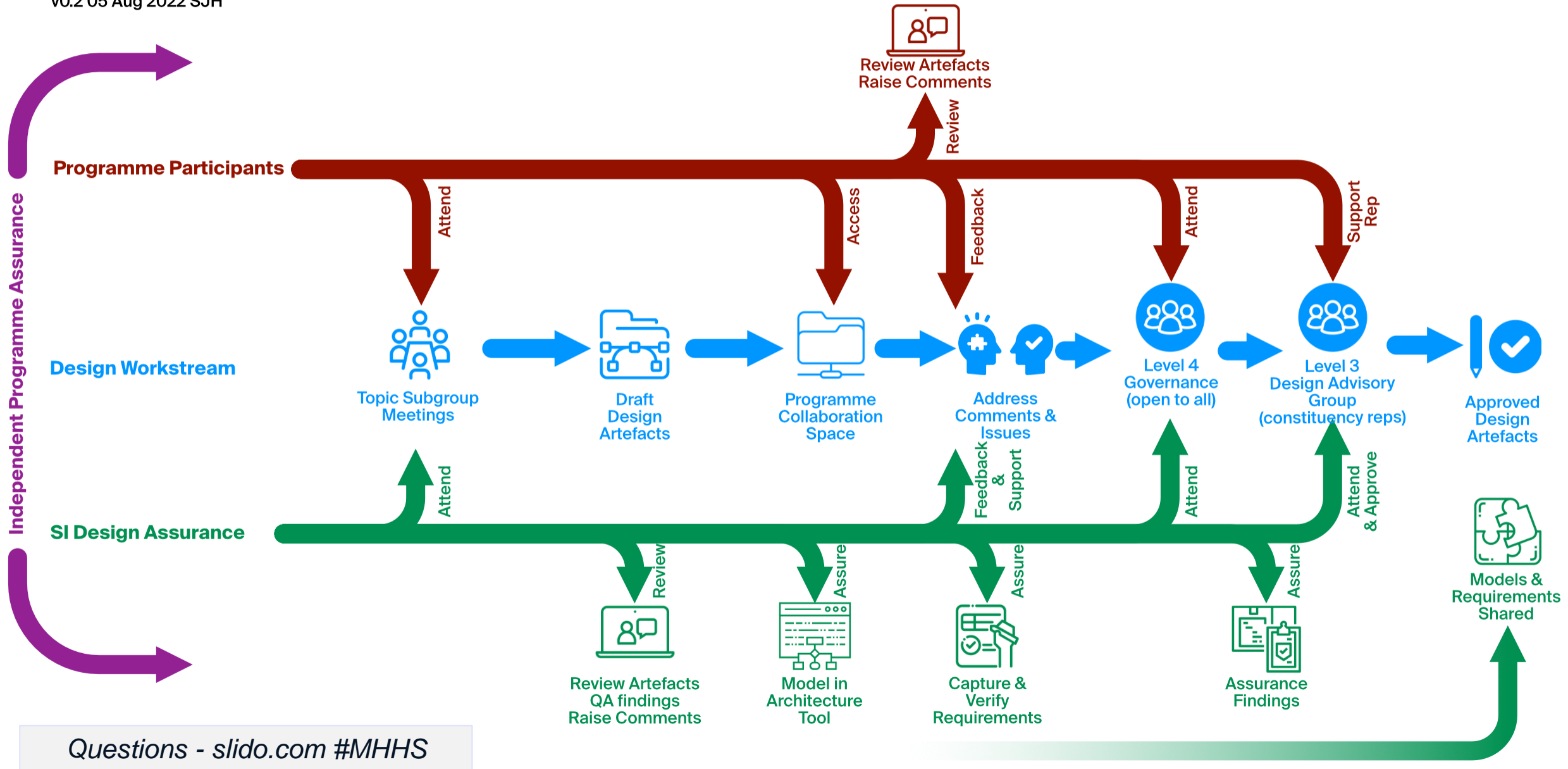
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Questions - [slido.com](https://www.slido.com) #MHHS

MHHS Design Delivery Process

v0.2 05 Aug 2022 SJH



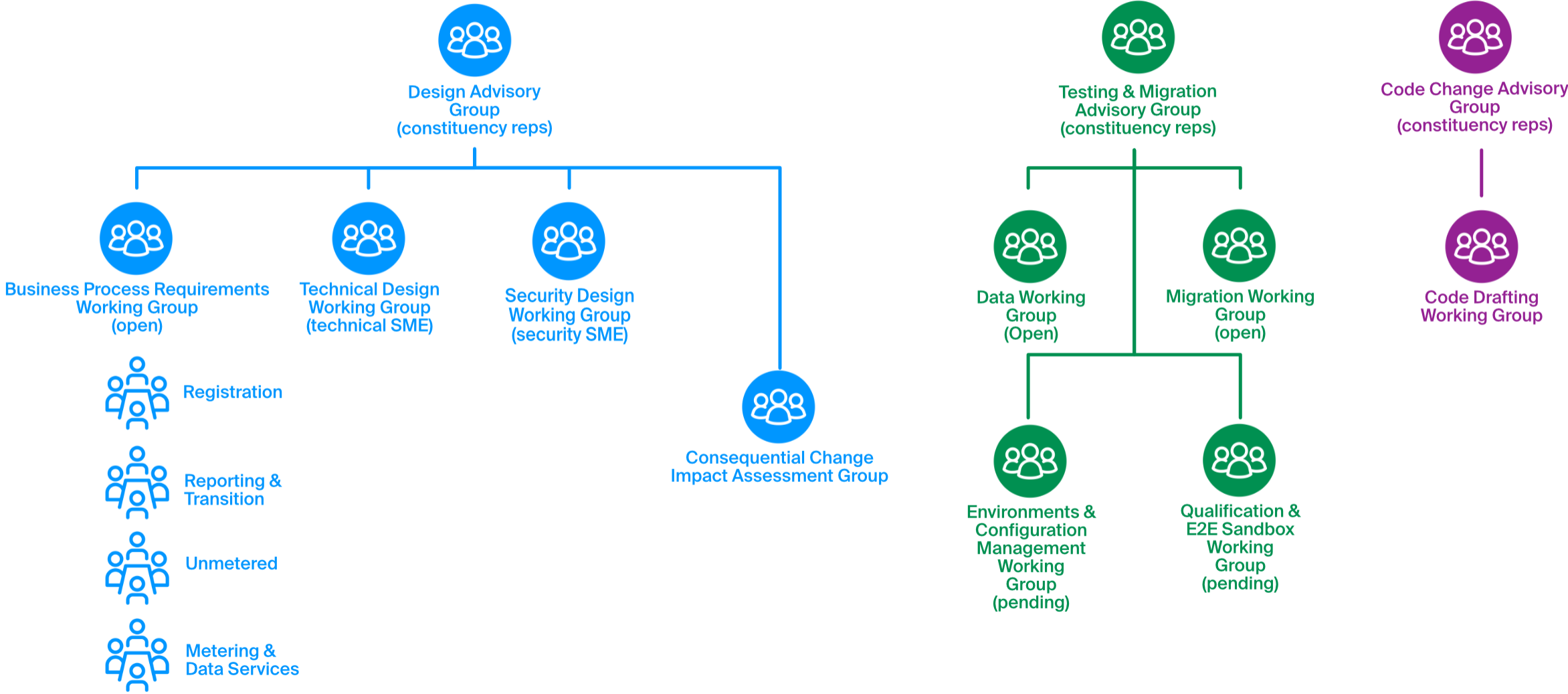
Questions - [slido.com](https://www.slido.com) #MHHS

MHHS Design (& Related) Working Groups

v0.3 5 Aug 2022 SJH

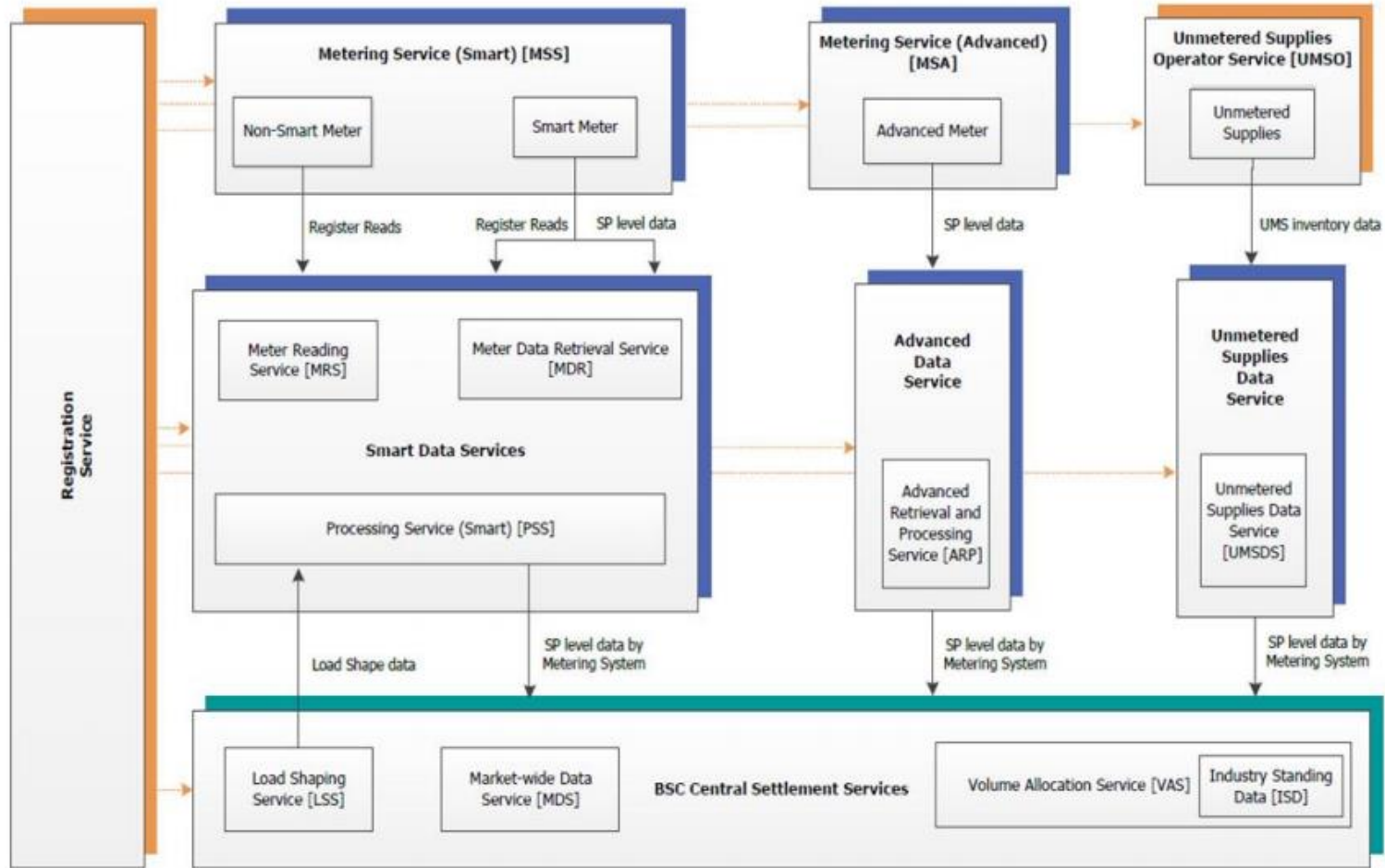
LEVEL 3

LEVEL 4

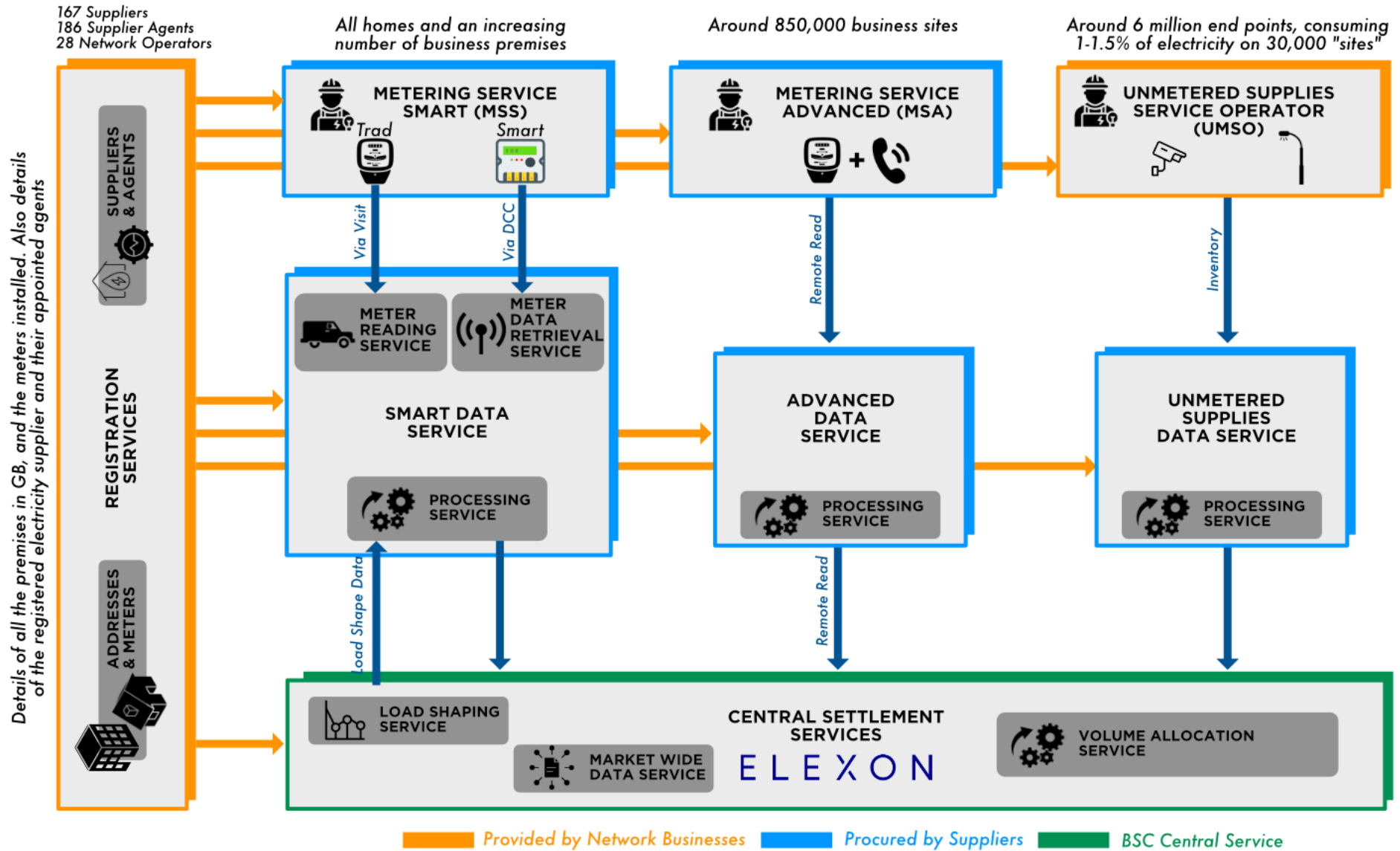


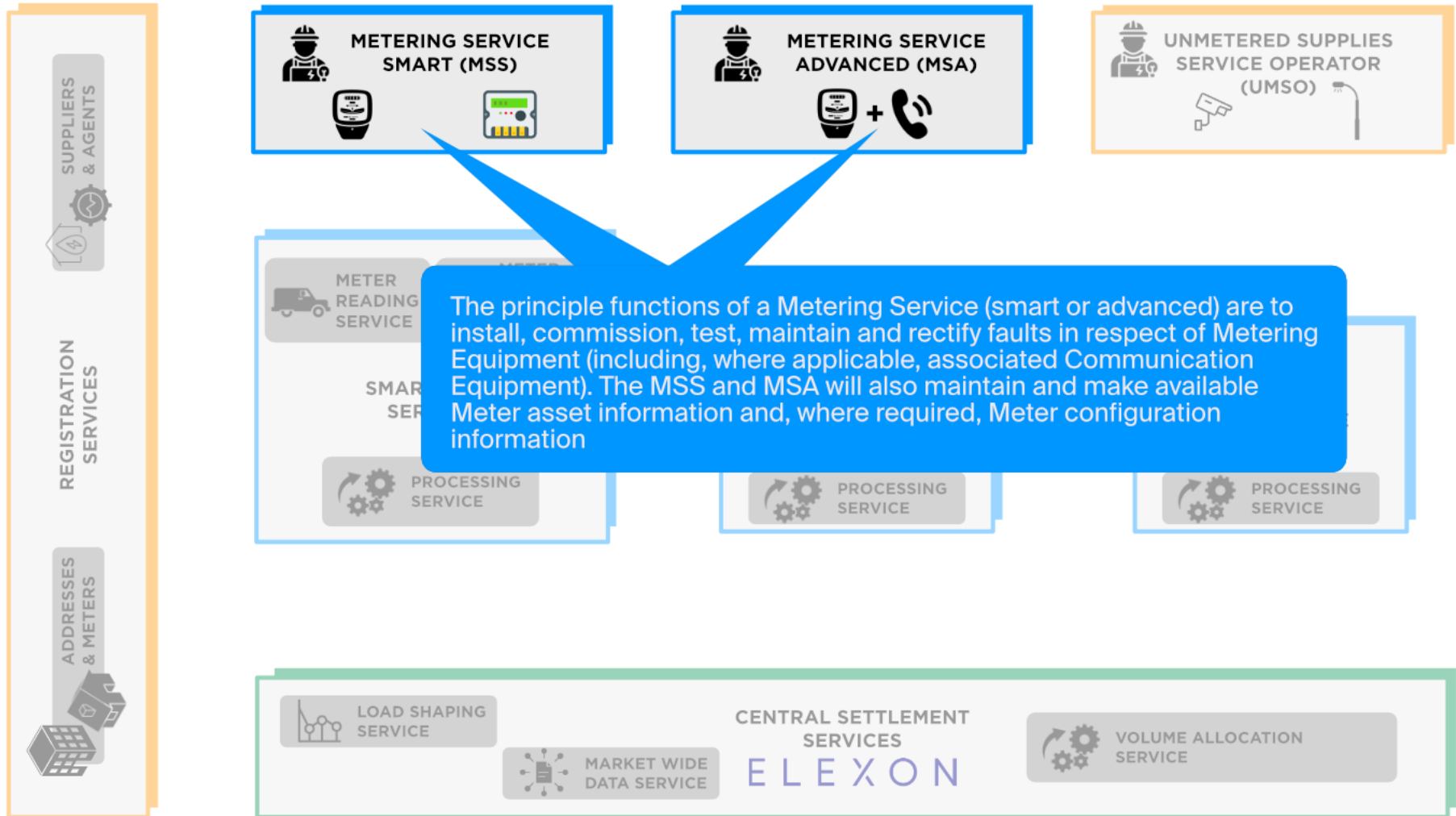
The Target Operating Model

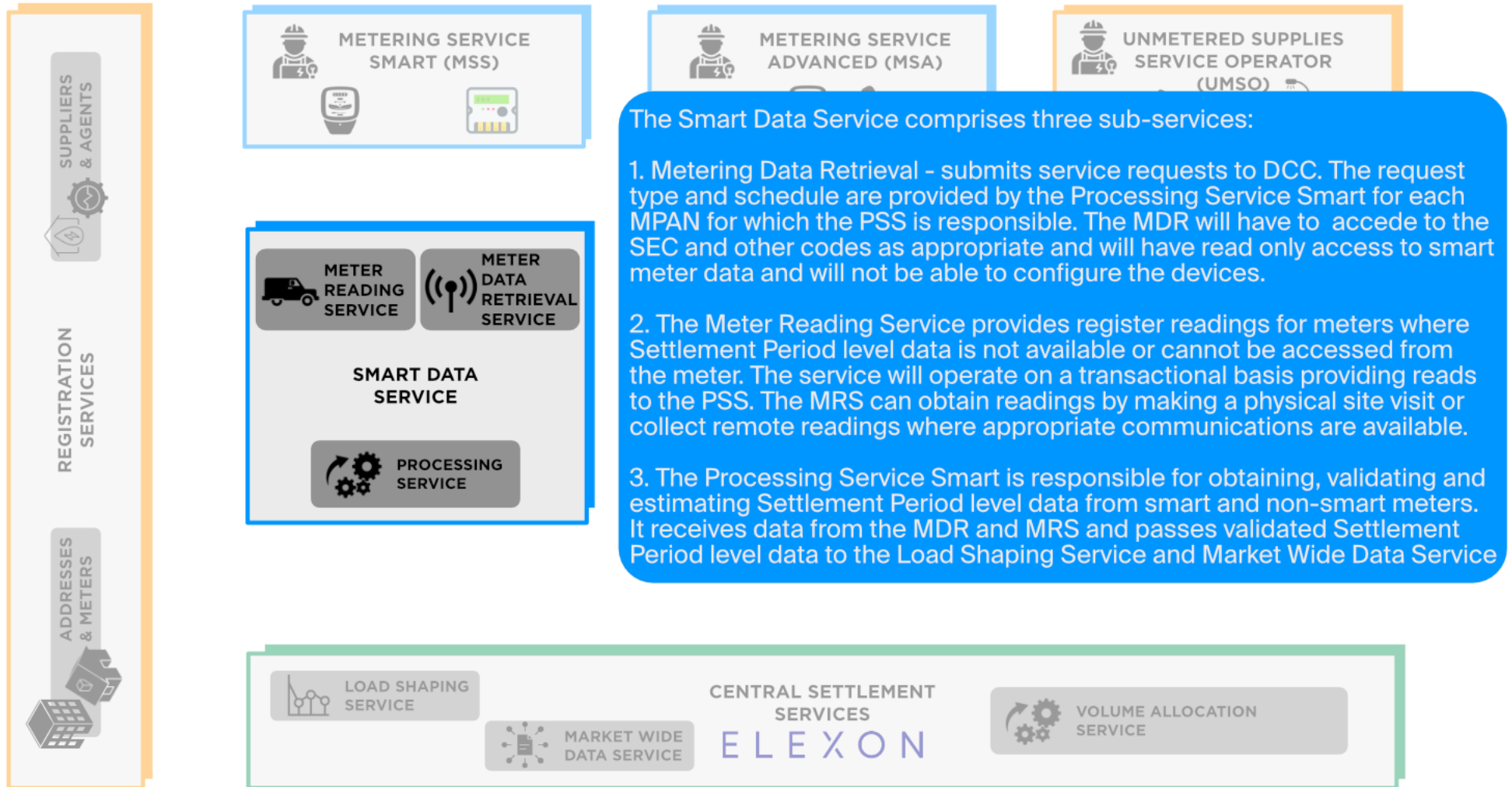
TOM Diagram



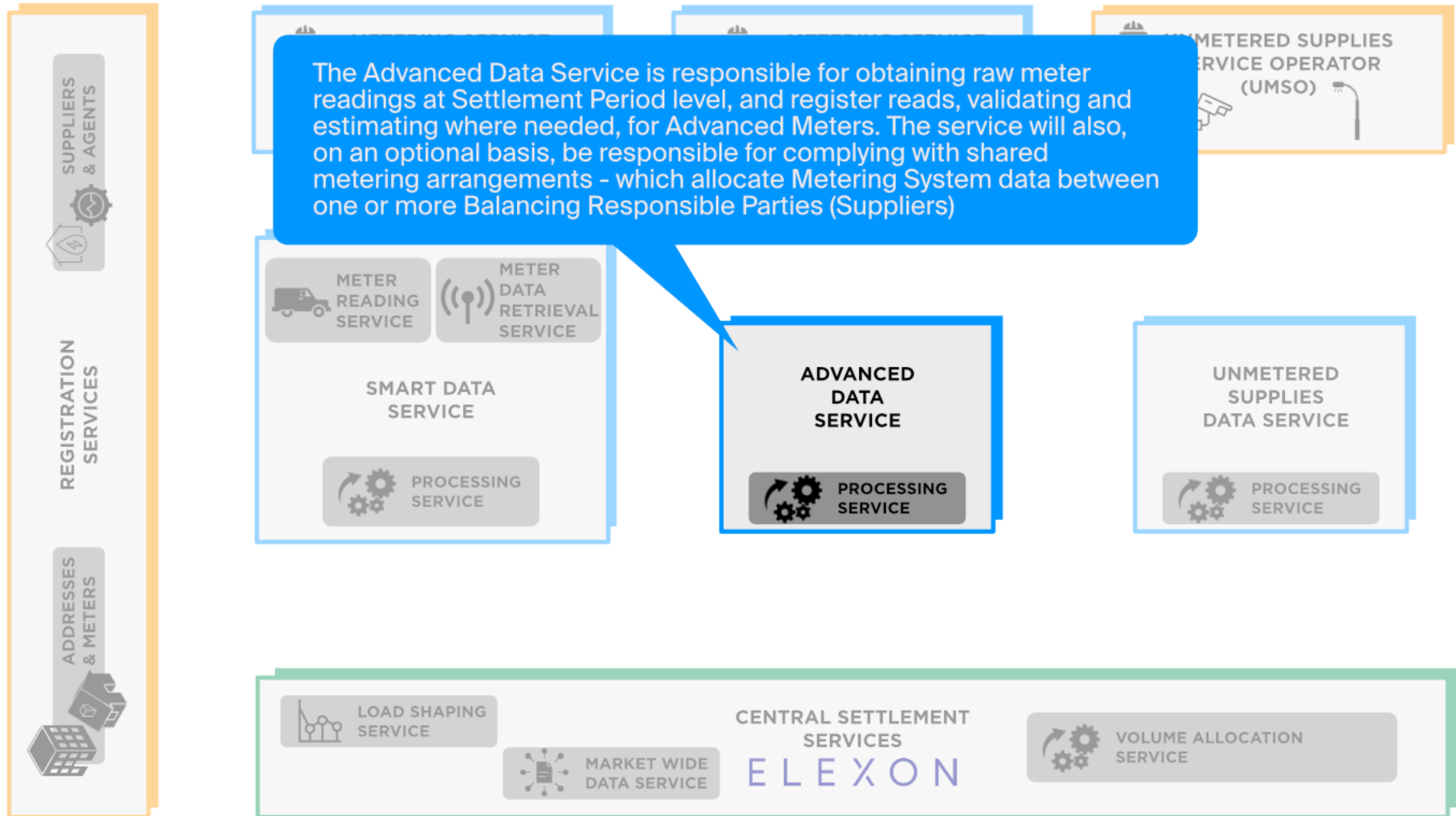
MHHS Target Operating Model – Ofgem with additional context



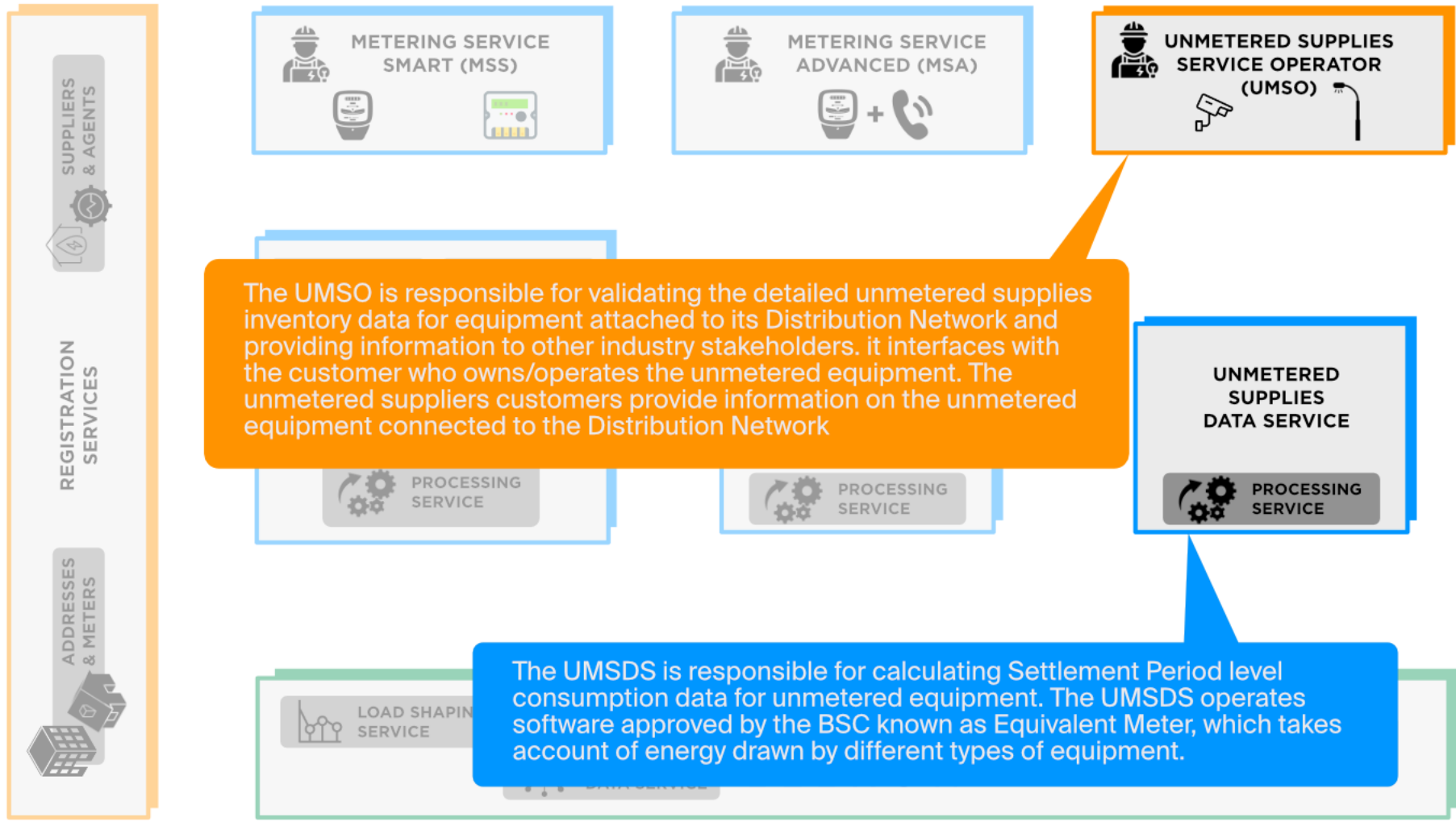




■ Provided by Network Businesses
 ■ Procured by Suppliers
 ■ BSC Central Service



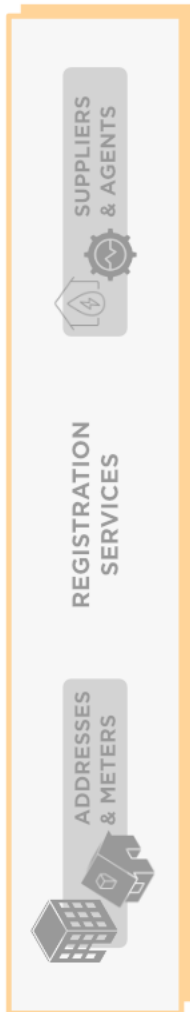
The Advanced Data Service is responsible for obtaining raw meter readings at Settlement Period level, and register reads, validating and estimating where needed, for Advanced Meters. The service will also, on an optional basis, be responsible for complying with shared metering arrangements - which allocate Metering System data between one or more Balancing Responsible Parties (Suppliers)



The UMSO is responsible for validating the detailed unmetered supplies inventory data for equipment attached to its Distribution Network and providing information to other industry stakeholders. It interfaces with the customer who owns/operates the unmetered equipment. The unmetered supplies customers provide information on the unmetered equipment connected to the Distribution Network

The UMSDS is responsible for calculating Settlement Period level consumption data for unmetered equipment. The UMSDS operates software approved by the BSC known as Equivalent Meter, which takes account of energy drawn by different types of equipment.

■ Provided by Network Businesses
 ■ Procured by Suppliers
 ■ BSC Central Service

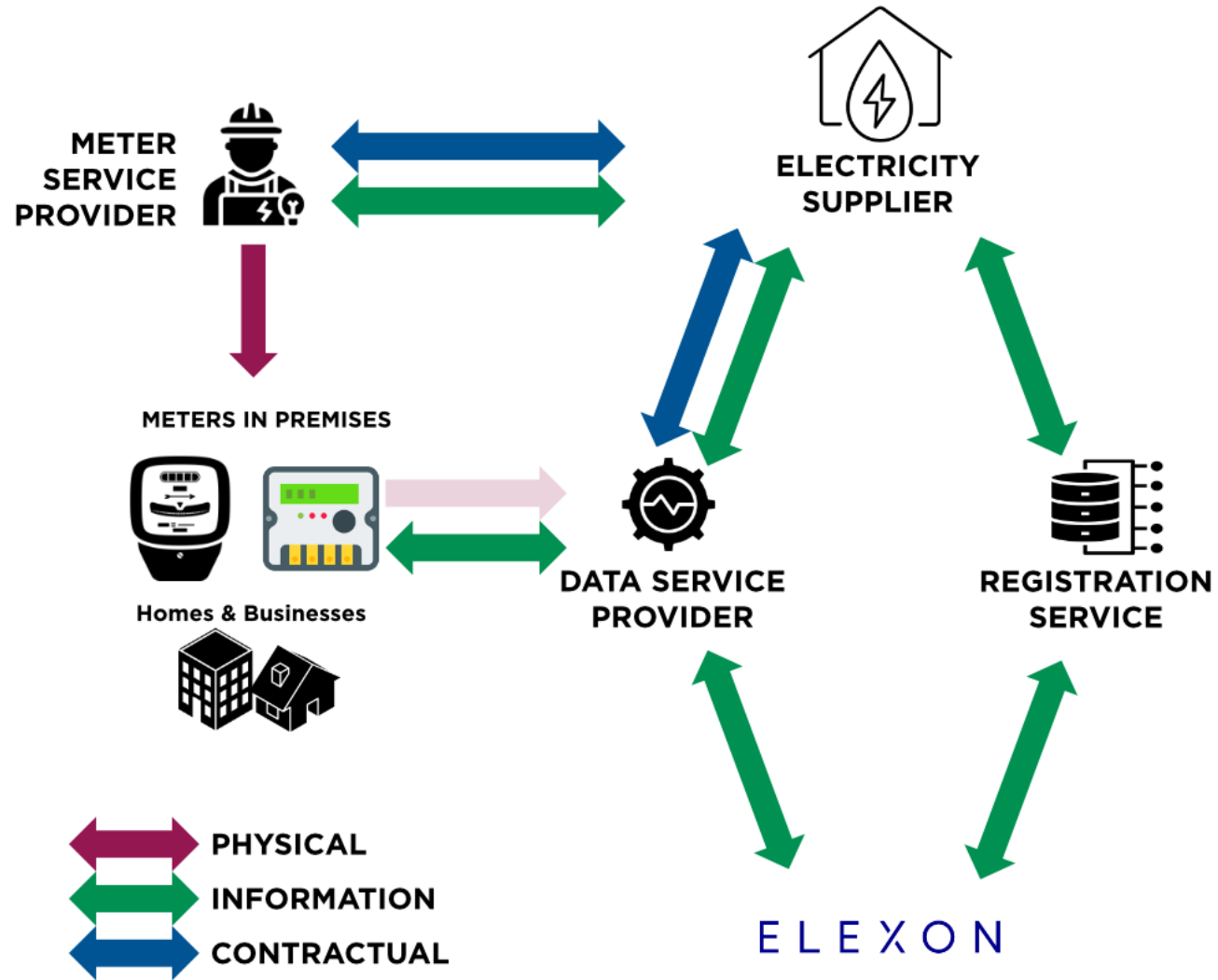


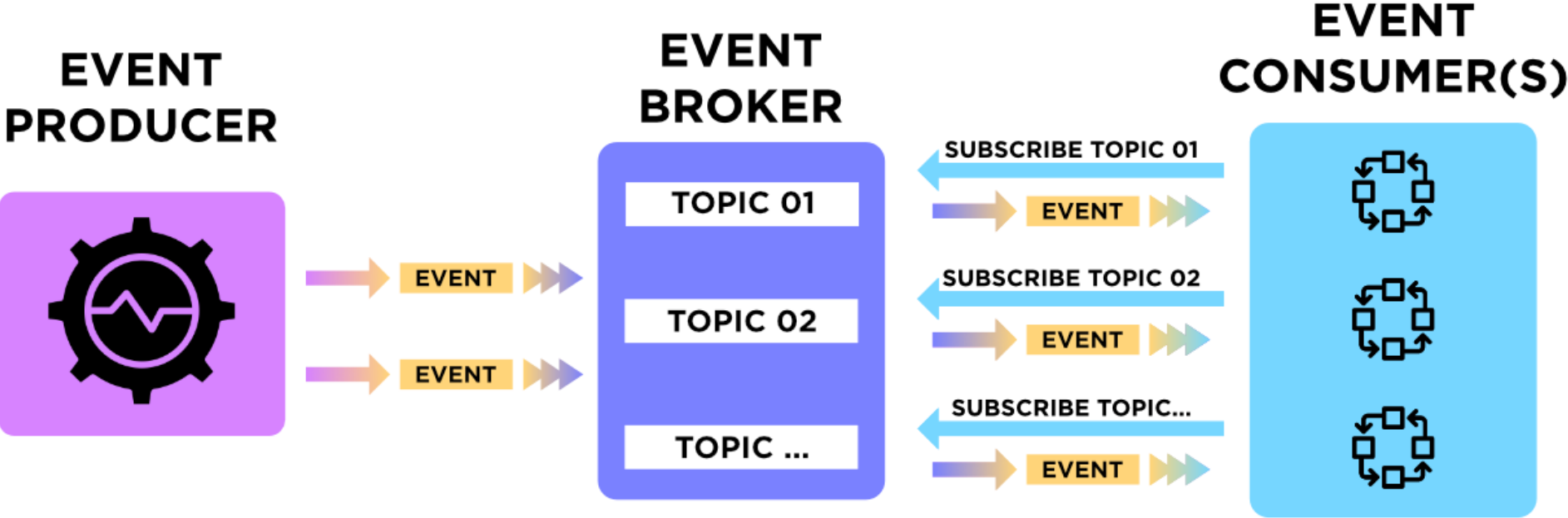
MHHS Introduces 4 new services that will be operated by Elexon

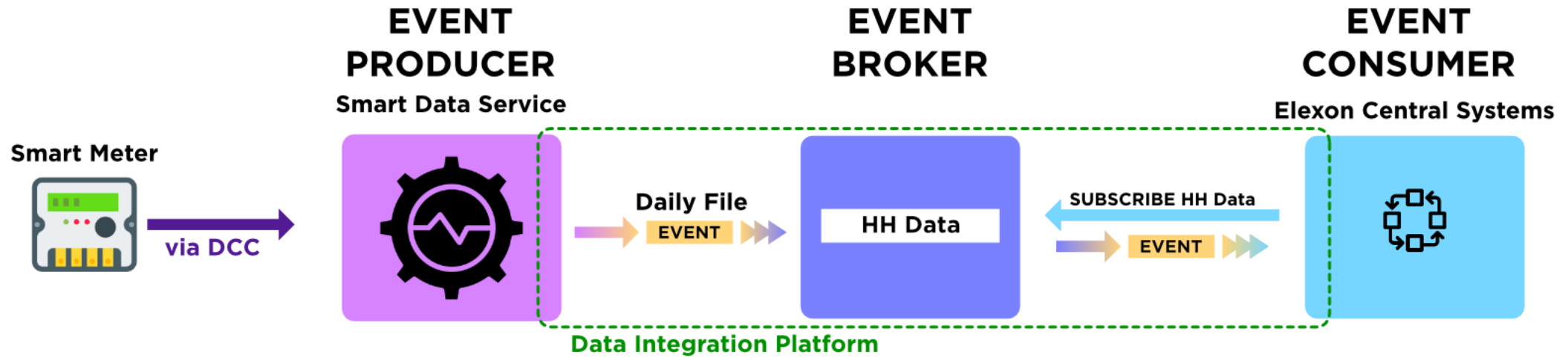
1. The Market Wide Data Service is responsible for processing Settlement Period level data from the MHHS Data Services. The MDS will provide data aggregations for Imbalance Settlement and other purposes (such as network charges)
2. Load Shaping Service is responsible for calculating energy consumption (import and export) Load Shapes for a number of defined categories of metering systems. The LSS uses validated Settlement Period level data accessed from the Smart Data Service. The Load Shape data will then be used by the PSS to convert register readings or daily consumption values into Settlement Period level data. The Load Shape data will also be used to estimate invalid Settlement Period level data for smart meters and default where data is missing or unavailable
3. Volume Allocation Service accesses Settlement Period level data from the MDS. The VAS also accesses Grid Supply Group take from the Central Data Collection Agent. Using these two data sets, the VAS calculates Settlement Period level energy volumes for Balancing Mechanism Units. The data is processed for each Settlement day in a scheduled run called a Volume Allocation Run. The processed BMU data is used in Imbalance Settlement calculations
4. Industry Standing Data - replaces the existing Market Domain Data service and will publish relevant meta data to be used by other services.

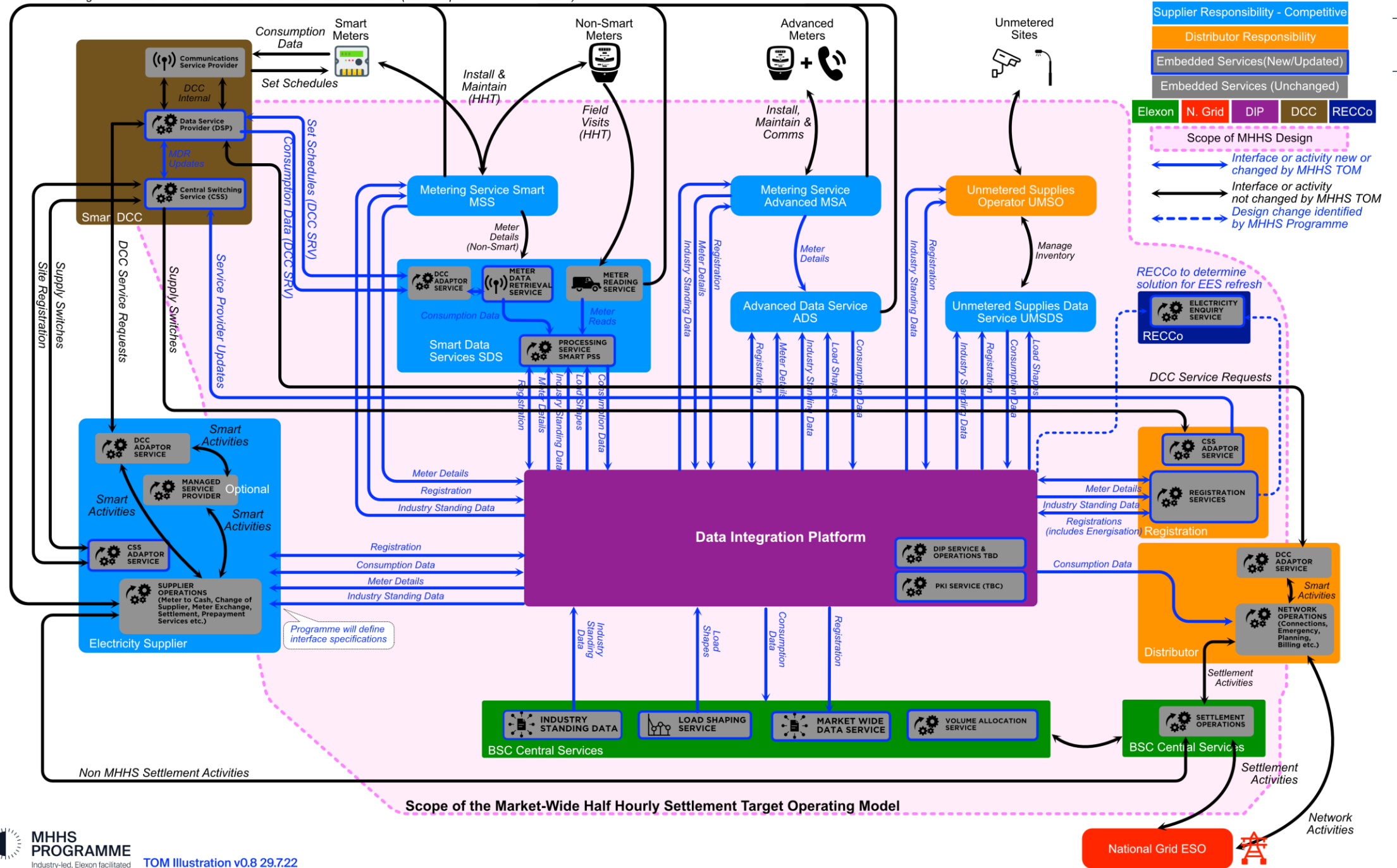


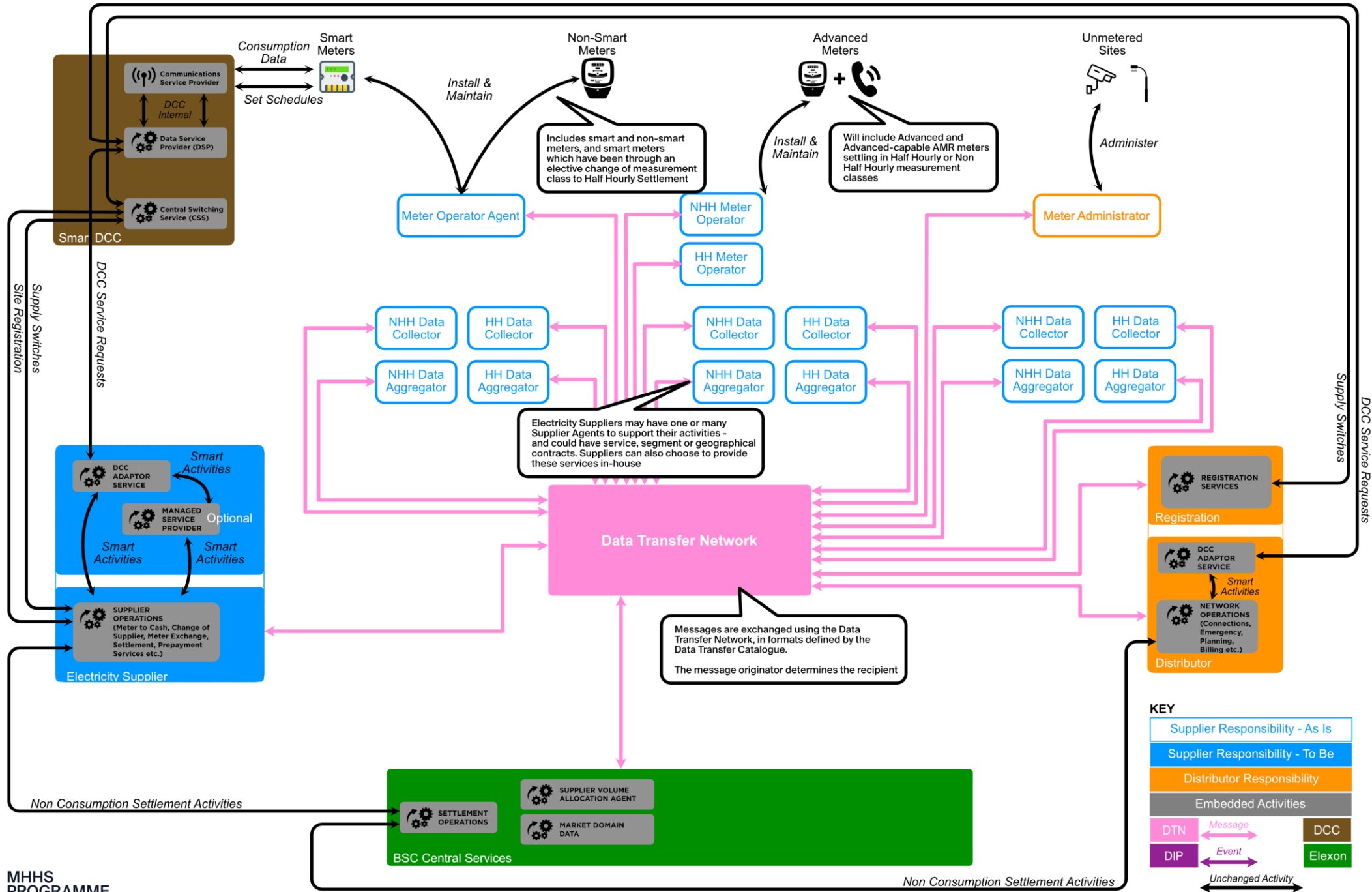
Provided by Network Businesses Procured by Suppliers BSC Central Service

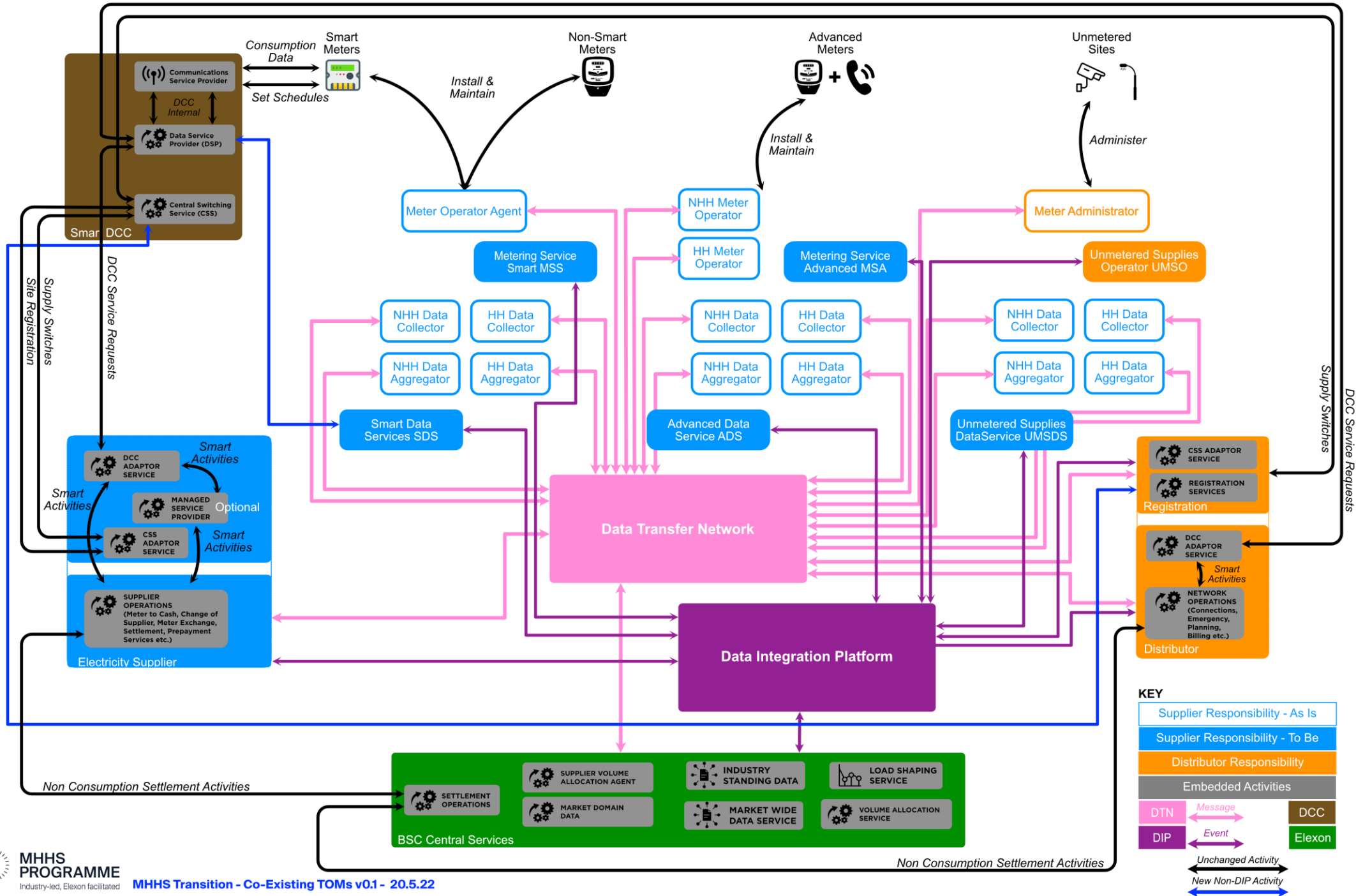


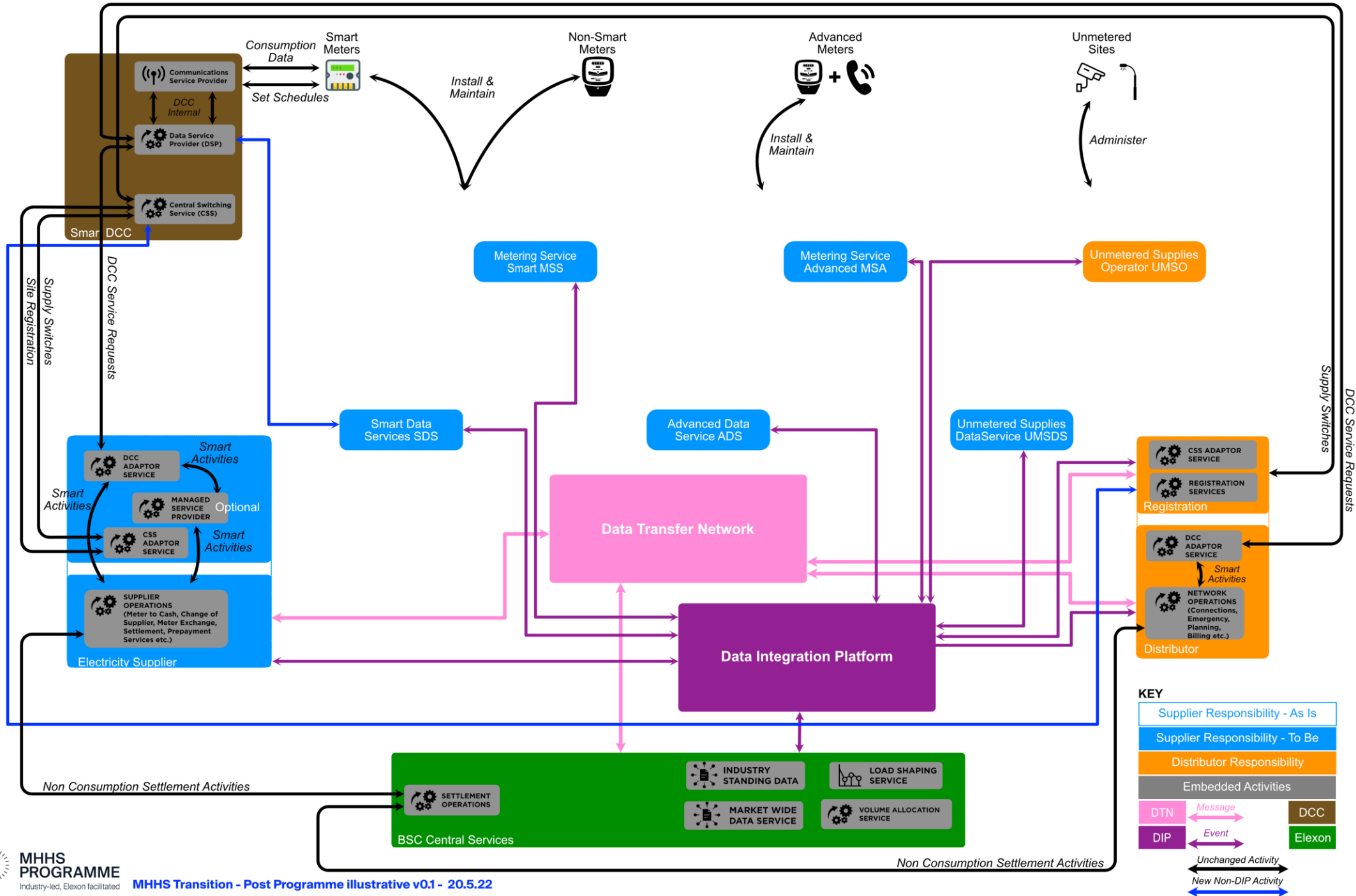


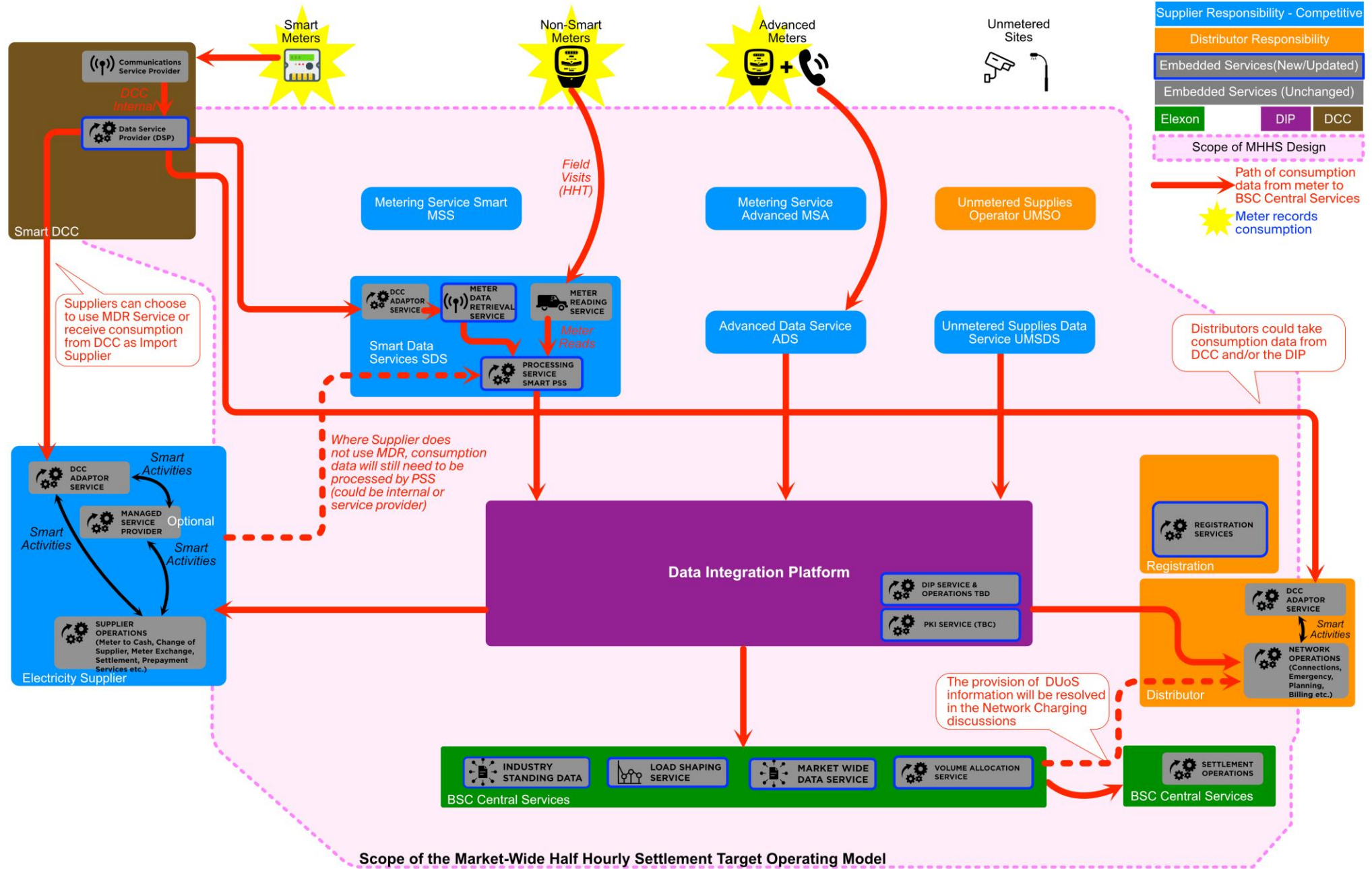


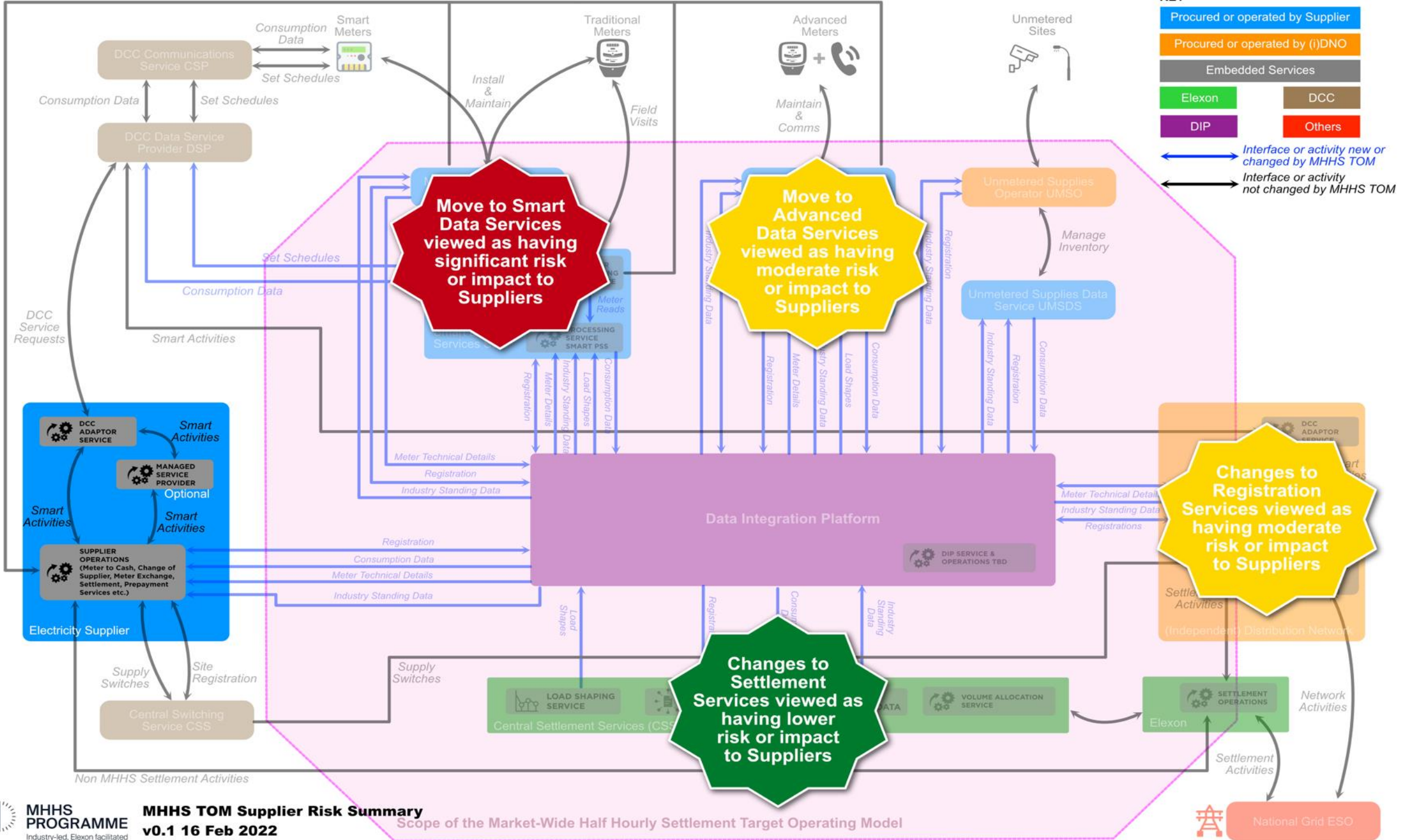








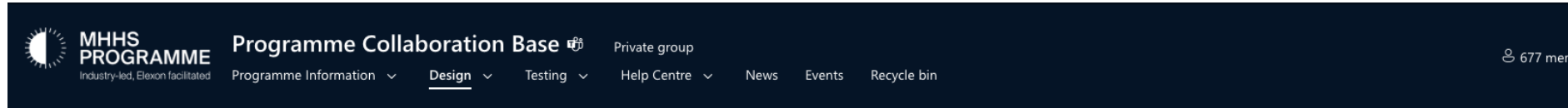




Accessing the Design

Online repository of the design documents

Artefact tracker and signposting guides will help participants navigate



Send to Immersive Reader

Design Artefacts

The Design Artefacts are listed below. They are grouped into four tranches and can be viewed using the links on the right. You can filter by Status or view by Tranche by selecting the appropriate link on the right.

Please see the list below for more information about each Artefact status:

- **Draft:** in development with Sub-Working Group
- **Under Review:** released for review with Level 4 Working Group
- **Awaiting Approval:** submitted to Design Advisory Group (DAG) for approval
- **Conditionally Approved:** approved by DAG, noting open design issues and dependencies, subject to Change Control
- **Approved:** Final version approved by DAG

You can also access the comments logs via the menu on the right.

Design Playback sessions

The first session on Design Playback Introduction and Plan took place on 2 August. The next session takes place on 5 August, covering the Design Overview. Please email PMO@mhhsprogramme.co.uk if you would like to attend.

To view all upcoming sessions and register, please click on Design Playback Sessions found under the Quick Links. To register for a session, please click on the title of the event and it will take you to the Eventbrite page. Please also find a plan of the Playback sessions under the Quick Links.

MHHS Design Artefacts Update

We are now in the final stages of development of the remaining Design Artefacts with the Sub-working Groups. Following some additional Working Group sessions over the last two weeks, the Design team has finalised the remaining Tranche 4 documents, ensuring traceability across all change controlled documents and checking that all open design issues and dependencies have been resolved ahead of

Quick Links

- Comments Logs for Design Artefacts
- Design Artefact Tracker
- Design Working Group Schedule
- Design Playback Sessions
- Design Playback POAP
- Design Artefact Matrix
- Design Review Guidance & Signposting

Collaboration Base – Artefact Tracker

Online sheet showing the current position with each of the artefacts

Excel MHHSP DES161 Design Artefact Tracker - Saved

Search (Option + Q)

Home Insert Draw Page Layout Formulas Data Review View Automate Help Viewing Share Comments

MHHSP-EM021

MHHS PROGRAMME Industry-led, Elexon facilitated

MHHSP - DESIGN ARTEFACT TRACKER

Document Type	Reference	Name / Description	Status	Level 4 Working Group	Sub-Group	Tranche	Date of DAG Approval	Revised version to be re-issued for review	Date Published for Review
Business Process Diagram	MHHSP-BP001	Change of Supplier	Conditionally Approved	BPRWG	Registration	2	8th Jun		
Business Process Diagram	MHHSP-BP002	Change of Service - Metering Service	Conditionally Approved	BPRWG	Registration	2	8th Jun	Yes	08-Aug
Business Process Diagram	MHHSP-BP003	Change of Service - Data Service	Conditionally Approved	BPRWG	Registration	2	8th Jun	Yes	08-Aug
Business Process Diagram	MHHSP-BP003A	CSS and DCC Update	Conditionally Approved	BPRWG	Registration	2	8th Jun	Yes	08-Aug
Business Process Diagram	MHHSP-BP003B	Change of Existing Service Appointment Details	Conditionally Approved	BPRWG	Registration	2	8th Jun		
Business Process Diagram	MHHSP-BP003C	Transfer of Reads - Change of Data Service	Conditionally Approved	BPRWG	Registration	2	8th Jun	Yes	08-Aug
Business Process Diagram	MHHSP-BP006	New Connection	Conditionally Approved	BPRWG	Registration	1	11th May	Yes	08-Aug
Business Process Diagram	MHHSP-BP010	Change of Registration Data	Conditionally Approved	BPRWG	Registration	1	11th May	Yes	08-Aug
Business Process Diagram	MHHSP-BP007	Disconnection	Conditionally Approved	BPRWG	Registration	1	11th May	Yes	08-Aug
Business Process Diagram	MHHSP-BP008	Change of Energisation Status	Conditionally Approved	BPRWG	Registration	1	11th May	Yes	08-Aug
Business Process Diagram	MHHSP-BP009	Change of Meter	Conditionally Approved	BPRWG	Registration	1	11th May	Yes	08-Aug
Business Process Diagram	MHHSP-BP011	Change of Market Segment and/or Connection Type	Ready for Review	BPRWG	Registration	4			08-Jul
Business Process Diagram	MHHSP-BP011B	Manage Market Segment (Registration Automation)	Internal Review	BPRWG	Registration	4			08-Aug
Business Process Diagram	MHHSP-BP011C	Registration Service Monitoring and Notifications	Internal Review	BPRWG	Registration	4			08-Aug
Business Process Diagram	MHHSP-BP004	Data Collection	Conditionally Approved	BPRWG	Metering & Data Services	4	11th May	Yes	08-Aug

Also has tabs to show:

- Design Issues
- Dependencies
- Dissensus
- Risks
- Principles
- Severity definitions

To help participants prioritise their review

Highlights which artefacts are most relevant to participant constituencies

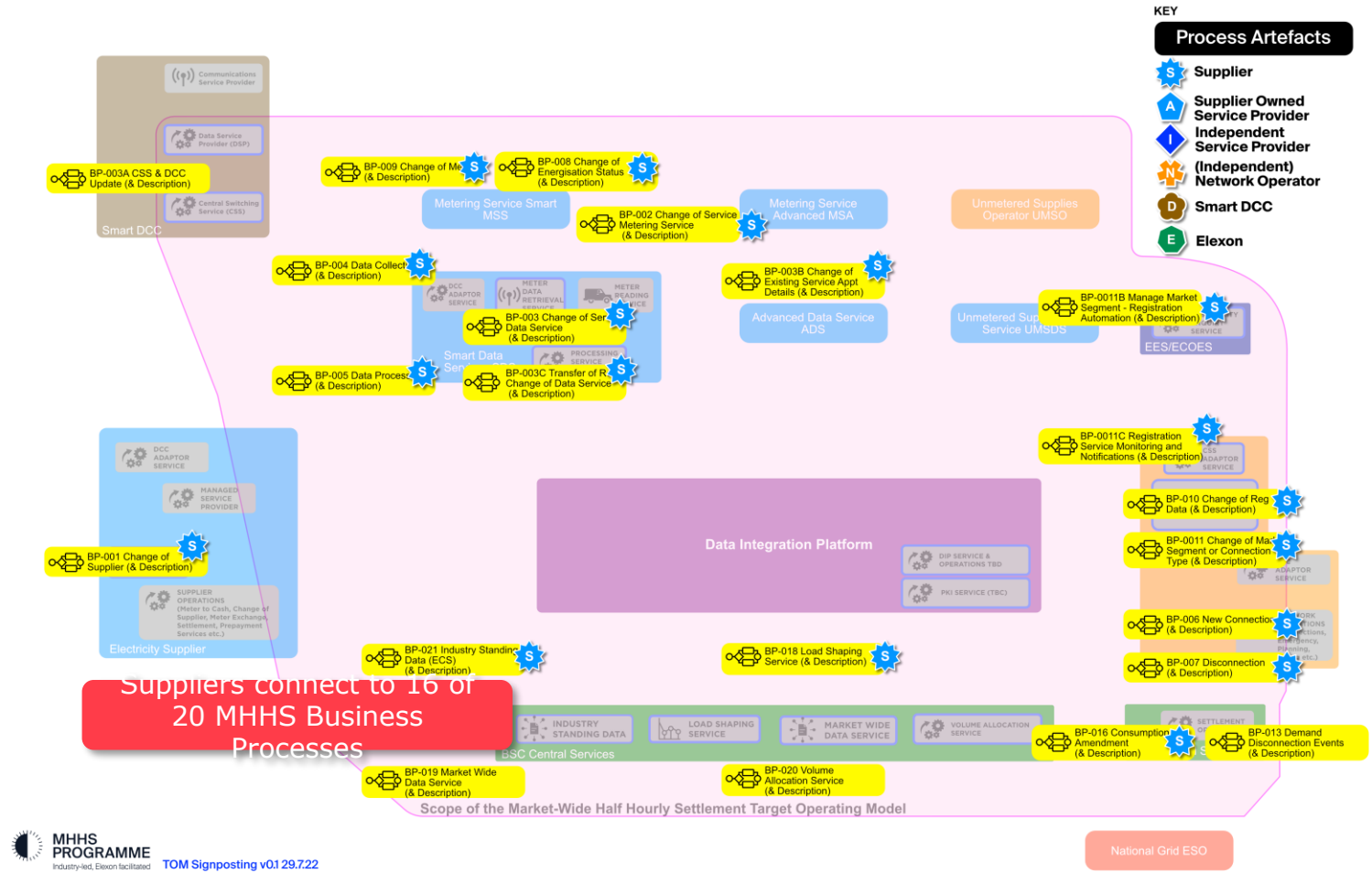
- Suppliers
- Agents (Meter and/or Data, Independent and Supplier owned)
- Networks
- Independent Networks
- Smart DCC
- Elexon

The screenshot shows an Excel spreadsheet titled "MHHS Design Artefact" with the following table structure:

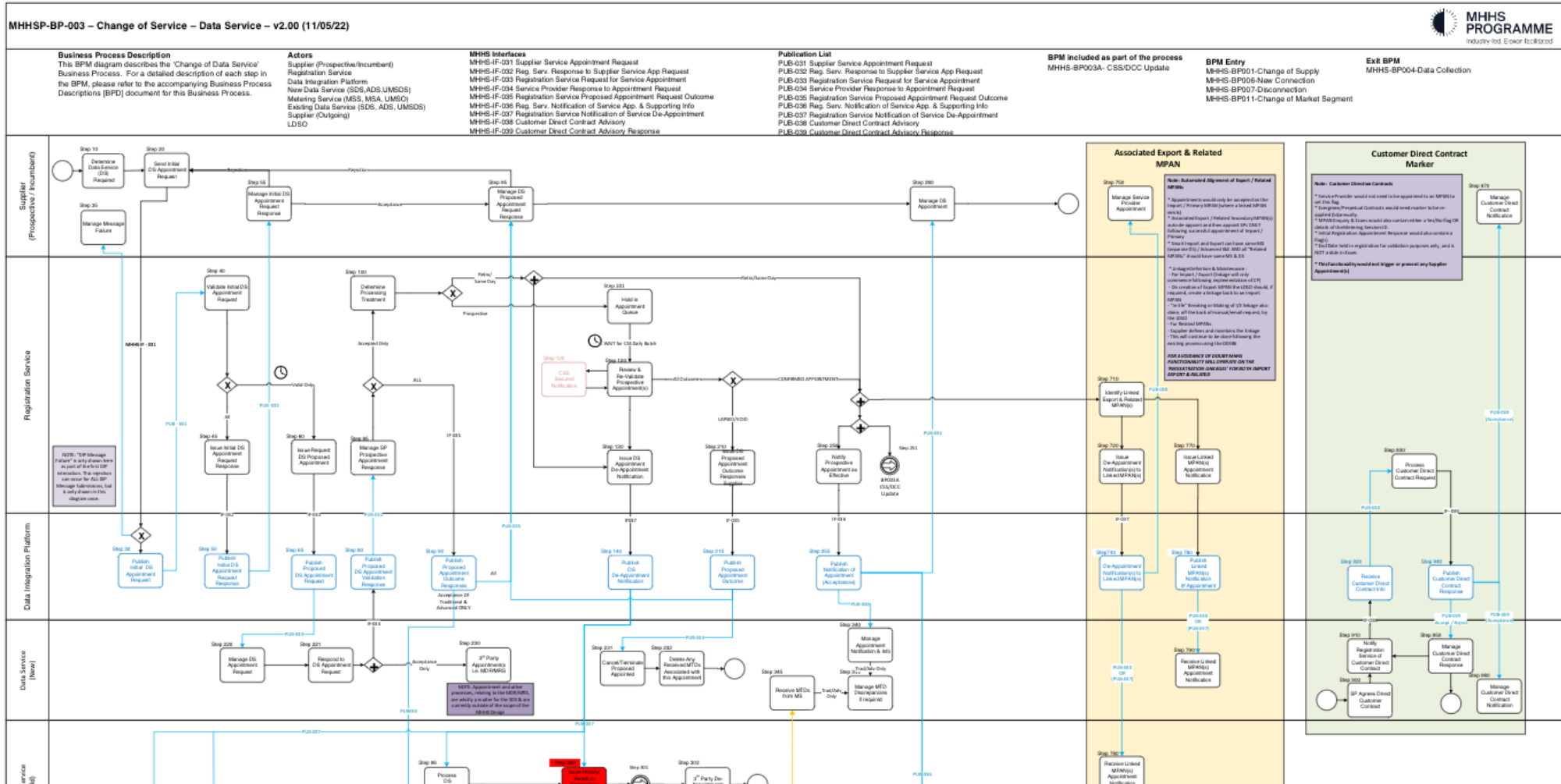
Process	Artefact Type	Artefact Ref	Artefact Name	Interface Ref	Interface Name	Constituency						
						Supplier	Independent Agent	Supplier Agent	DNO	IDNO	Smart DCC	Elexon
MPAN Ownership: Change Of Supplier	Business Process Diagram	MHHSP-BP001	Change of Supplier			Y			Y	Y	Y	Y
	Business Process Description	MHHSP-BPD001	Change of Supplier			Y			Y	Y	Y	Y
	Interface Specification	MHHSP-DES138	Interface Catalogue	MHHSP-IF001	Notification of Change of Supplier	Y			Y	Y	Y	Y
	Interface Specification	MHHSP-DES138	Interface Catalogue	MHHSP-IF002	Registration Update to Supplier (COS Gain)	Y			Y	Y	Y	Y
MPAN Ownership: Change of Service- Metering Service	Business Process Diagram	MHHSP-BP002	Change of Service - Metering Service			Y	Metering Service		Y	Y	Y	
	Business Process Description	MHHSP-BPD002	Change of Service- Metering Service			Y	Metering Service		Y	Y	Y	
	Interface Specification	MHHSP-DES138	Interface Catalogue	MHHSP-IF031	Supplier Service Appointment Request	Y	Metering Service		Y	Y	Y	
	Interface Specification	MHHSP-DES138	Interface Catalogue	MHHSP-IF032	Registration Service Response to Supplier Service App Request	Y	Metering Service		Y	Y	Y	
	Interface Specification	MHHSP-DES138	Interface Catalogue	MHHSP-IF033	Registration Service Request for Service Appointment	Y	Metering Service		Y	Y	Y	
	Interface Specification	MHHSP-DES138	Interface Catalogue	MHHSP-IF034	Service Provider Response to Appointment Request	Y	Metering Service		Y	Y	Y	
	Interface Specification	MHHSP-DES138	Interface Catalogue	MHHSP-IF035	Registration Service Appointment Status Notification	Y	Metering Service		Y	Y	Y	
	Interface Specification	MHHSP-DES138	Interface Catalogue	MHHSP-IF036	Registration Service Notification of Service Appointment & Supporting In	Y	Metering Service		Y	Y	Y	
	Interface Specification	MHHSP-DES138	Interface Catalogue	MHHSP-IF037	Registration Service Notification of Service De-Appointment	Y	Metering Service		Y	Y	Y	
	Interface Specification	MHHSP-DES138	Interface Catalogue	MHHSP-IF038	Customer Direct Contract Advisory	Y	Metering Service		Y	Y	Y	
	Interface Specification	MHHSP-DES138	Interface Catalogue	MHHSP-IF039	Customer Direct Contract Advisory Response	Y	Metering Service		Y	Y	Y	
	Interface Specification	MHHSP-DES138	Interface Catalogue	MHHSP-IF041	Cumulative Meter Reading	Y	Metering Service		Y	Y	Y	
Business Process Diagram	MHHSP-BP003	Change of Service - Data Service				Y	Data Service		Y	Y	Y	
Business Process Description	MHHSP-BPD003	Change of Service- Data Service				Y	Data Service		Y	Y	Y	

Visualisation of the matrix, as presented during the playback kick off earlier this week

This shows the business processes highlighted for consideration by Suppliers




Design Artefacts – Business Processes Diagrams (22)



PDF documents showing the detailed steps of the business processes by organisation

Design Artefacts – Business Process Descriptions (22)

 MHHS PROGRAMME Industry-led, Elexon facilitated		MHHS-PDP009- Business Process Description - BP009 Change of Metering v2.0						
Step No.	Process map wording	Description	Interface	Interface ID	Sender	Recipient/Service	Traceability Requirement	Traceability Method Statement
40	Physical exchange completes.	Metering Services will complete the required metering works requested by Supplier and update their systems to reflect the changes made.					MHHS-BR-MS-056	
45	Energisation Status Changed in same visit	Supplier may also require the meter point need to have an energisation change. Metering services will follow BP008 for the energisation change					MHHS-BR-MS-057	
50	To BP008 – Change of Energisation Status	Metering services will follow BP008 where an energisation change is also required with the meter update.						
55	Notify Metering Changes to Registration Service	Metering service will send MHHS-IF-005 to the Registration Service to update the new metering information.	Metering Service MTD Updates to Registration	MHHS-IF-005	Metering services	DIP	MHHS-BR-MS-058 MHHS-BR-MS-058.3	
60	Cumulative Meter Read(s)	Where cumulative reads were obtained Metering services will send this on MHHS-IF-041					MHHS-BR-MS-061	
65	Metering Information Update	The DIP will receive MHHS-IF-005 message with the updated metering details and publish this to the Registration Service	Metering Service MTD Updates to Registration	MHHS-IF-005	Metering services	DIP		
70	Manage Message Failure	The DIP will send metering services a failed message where the Metering Service MTD Updates to Registration has failed DIP validation			DIP	Metering services		
75	Non-Smart DTC flows: D0149 (non-smart only) D0150 (non-smart only) D0010	Metering services will need to send D150/D149 & D0010's for traditional meters. These will go to Supplier, LDSO and Data services		D150/D149/D0010	Metering Services	Supplier LDSO Data Service		
	Advanced DTC flows:							

Excel spreadsheet providing detail to support the business process diagrams, and traceability across the design

Design Artefacts – Business Requirement Specifications (13)



MHHS Metering Service Requirements - MSS Only Requirements

Requirements to be finalised later in design

Reference	Area	Requirement	Requirement Description	Supporting information/ questions	Process	Step	Interface
Change of Supplier - Metering Service requirements					Change of Supplier		
Change of Metering Service - Metering Service requirements					Change of Metering Service		
MHHS-BR-MS-001	Metering Service	Receive proposed appointment service request	Metering Service must obtain Registration Service Request for Service Appointment with Metering Service proposed appointment requests, via the appropriate interface on the Data Integration Platform	PUB-033	BP002 Change of Metering Service	70	PUB-033
MHHS-BR-MS-002	Metering Service	Validate and respond to proposed appointment service request	Metering Service must confirm that they are certified to service the connection type and able to contractually deliver the Metering Service based on the information contained in the proposed appointment request and publish a response (acceptance or rejection) on the Data Integration Platform via the appropriate interface. Where a request is rejected the Metering Service must provide an appropriate rejection reason in the response. When the appointment request is accepted the Metering Service should be aware that at this point the appointment remains "prospective" and there is a possibility that it may need to be lapsed at a later stage.	MHHS-IF-034 to Registration Service	BP002 Change of Metering Service	75	MHHS-IF-034
MHHS-BR-MS-003	Metering Service	Delete data for rejected appointments	Metering Service must, for any proposed appointments it rejects, delete any metering details received, within 30 days of notifying the rejection.		BP002 Change of Metering Service	75	
			Metering Service must be able to process requests to vary the conditions of an existing appointment received via the				

Excel spreadsheet documenting requirements



Questions - [slido.com](https://www.slido.com) #MHHS

Interface Catalogue

Includes 52 logical interface specifications – defines the data models and data catalogues for interfaces
Reporting Catalogue

Includes 18 reporting interface specifications – defines the data models and data catalogues for reports

Supporting Artefacts

13 artefacts covering the following:

- Method statements
- Operational Choreography
- Logical Data Model etc.

Technical Artefacts

- DIP Functional specification
- DIP Non functional requirements
- E2E Technical architecture
- E2E Non functional requirements
- Physical interface specification

- E2E Security Architecture
- E2E Security Requirements
- Cyber Security Code of Connection Guidance
- (access to the security artefacts is restricted)

- Identifying Load Shape Categories using Registration data
 - Calculating Meter Advances, Daily Advances, and Daily Advance Estimates
- 1.4 This document sets out how to identify **Load Shape Categories** for each Metering Point and the estimation methodologies to be used using each type of advance that is available.
 - 1.5 **UTC Period Level Consumption** refers to consumption or export data that is of UTC Period granularity. The ADS must have flexibility to **amend** the duration of a UTC Period.
 - 1.6 The **UTC Period** duration will not change within a Settlement Day. Participant systems **should** be future proofed to handle changes to the duration of a **UTC Period**. This does not mandate the complete re-design of participants' systems, however any changes to existing or new functionality introduced to support MHHS should be configurable so as to allow for different **UTC Period** lengths.

2. Where UTC Period Consumption data is available for settlement

Advanced Meter data with UTC Period Consumption

- 2.1 Where UTC Period Consumption is available for Settlement from the meter for import or export this data shall be used for Settlement provided it is deemed valid according to the requirements set out below. Where deemed invalid by the ADS, it should not be used for Settlement.

ADS validation requirements (General)

- 2.2 Unless the ADS is informed by the **MSA** that the retrieved data is incorrect, the ADS shall accept Meter Period Value data collected from the Meter for validation processing. The ADS shall record all occurrences where data entering Settlements has been changed following instruction from the Supplier.
- 2.3 The ADS shall retain the original values along with any alarms recorded in the Meter, the reason for failure where the value is invalid and the reason for accepting data previously flagged as suspect.
- 2.4 The data retrieval process shall include the following checks; however in the case where data is received from the Outstation automatically step 'Outstation Time' shall be performed at least every 20 calendar days by interrogation only.
- 2.5 The ADS shall perform a validation check of Reactive Power Meter Period Values in addition to the Active Power Meter Period Values within step 'Cumulative/Total Consumption Comparison' and 'Main/Check Comparison'.

Outstation Id (Device Id)

Extract from the Advanced Data Service Validation and Estimation Method Statement


MHHSP - Interface & Publication List

These cols require further review as part of Physical Design & ECS Data Reqs & Obfuscation

MHHSP Interface ID	Interface Name	Description	Sender	Always (Role)	Primary Recipient (Only Sender Knows)	Secondary Recipient (MPAN Look Up / Optionality)	Business Processes
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 System - MPAN Creation & Update	Central System - 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-014	Request Historic Consumption						

Ref D-Flows

Design Artefacts – Interface Catalogue 2



MHHS INTERFACE / MESSAGE SPECIFICATION

Interface Name:	Notification of Change of Supplier	DIP Delivery Pattern	Pattern A (JSON via DIP)
Interface / Pub ID:	IF-001 / PUB-001	Security Category:	Cat 2
Version Number:	v0.1	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.

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	Obfuscation	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"
        }
      }
    }
  }
]
```

Design Artefacts – Interface Catalogue 3



MHSP - Data Item Catalogue v0.01

If a Data Item is no longer required, pls set the NHSP Status to 'Removed' and hide the row.


<<< Hide this row to remove Long Descriptions

MHSP Data Item ID	Data Item	Definition	DTN ID	MHSP Status	Authoritative Source	MHHS Owner	Regulatory Classification	Data Classification	MHSP Data Type	Data Type	Max Size	Type
DI-001	Address Line 1	A component of a metering point site address. Recommended to be Free Text, but common for the entire address to be entered into the first value.	J0136	Created	LDSO	LDSO		Public	DT-001-AddressLine	String	40	String~40
DI-002	Address Line 2	Recommended to be Sub-building Name / Number	J0137	Created	LDSO	LDSO		Public	DT-001-AddressLine	String	40	String~40
DI-003	Address Line 3	Recommended to be Building Name / Number	J0138	Created	LDSO	LDSO		Public	DT-001-AddressLine	String	40	String~40
DI-004	Address Line 4	Recommended to be Dependent Thoroughfare	J0139	Created	LDSO	LDSO		Public	DT-001-AddressLine	String	40	String~40
DI-005	Address Line 5	Recommended to be Thoroughfare	J0140	Created	LDSO	LDSO		Public	DT-001-AddressLine	String	40	String~40
DI-006	Address Line 6	Recommended to be Double Dependent Locality	J0141	Created	LDSO	LDSO		Public	DT-001-AddressLine	String	40	String~40
DI-007	Address Line 7	Recommended to be Dependent Locality	J0142	Created	LDSO	LDSO		Public	DT-001-AddressLine	String	40	String~40
DI-008	Address Line 8	Recommended to be Locality / Post Town	J0143	Created	LDSO	LDSO		Public	DT-001-AddressLine	String	40	String~40
DI-009	Address Line 9	Recommended to be County	J0144	Created	LDSO	LDSO		Public	DT-001-AddressLine	String	40	String~40
DI-060	Metering Point Postcode	The full postcode of the metering point site.	J0263	Created	LDSO	LDSO		Public	DT-007-UKPostalCode	String	10	String~10
DI-010	Appointment Code (MS)	A code that indicates if the appointment instruction was accepted, or a code that indicates the reason why the appointment has not been accepted.	J1016	Created	Metering Service	Metering Service		Public	~	String	1	String~1
DI-011	Appointment Code (DS)	A code that indicates if the appointment instruction was accepted, or a code that indicates the reason why the appointment has not been accepted.	J1016	Created	Data Service	Data Service		Public	~	String	1	String~1
DI-012	Change of Segment Indicator	Indicates that a change of segment process is underway	NEW	Created	Supplier	Supplier				Boolean	1	Boolean~1
DI-013	Change of Segment Indicator Effective From Date	The date-time on which the change of segment process was initiated by the supplier with the registration system	NEW	Created	Registration Service	Registration Service			DT-003-Local DateTime	String	25	String~25
DI-015	Connection Type Indicator	A code to indicate the type of connection.	new	Created	LDSO	LDSO		Public		Enum String	1	Enum String~1
DI-016	Connection Type Indicator Effective From Date	The date and time from which the Connection Type is in effect.	new	Created	LDSO	LDSO		Public	DT-003-Local DateTime	String	25	String~25
		Describes the granularity of energy settlement data that a customer								Enum		

There is a complete glossary of defined terms and acronyms

Access via the Collaboration Base Help Centre

[Programme Glossary](#)



Send to Immersive Reader

Programme Glossary

For help with terms used in the MHHS Programme.

- Acronym Finder
- New/Update Term
- Guide, Updates & Download

Select Letter to filter the glossary

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

MHHS Glossary

Active Energy
AE - The electrical energy produced, flowing or supplied by an electric circuit during a time interval, being the integral with respect to time of instantaneous Active Power, measured in units of watt-hours or standard multiples thereof.
Advanced Data Service
ADS - The Advanced Data Service is the 'Qualified' service that provides the Advanced Retrieval and Processing Service (ARP)

Online database of terms,
Searchable and with an
A-Z index

You can also search or
browse by acronym

Webform for suggested
additions or changes

MHHS Glossary > M

Managed Service Provider

MSP - Businesses that support other businesses by providing systems and services to simplify their operations in the energy market

Market Domain Data

MDD - The reference data (including Profile Classes and Grid Supply Point Groups) used by all suppliers, supplier agents and licensed distribution system operators in the electricity market to facilitate the operation of the Suppliers Volume Allocation Trading Arrangements.

Market Participant ID

MPID - Market Participants are any party that interact with Settlement or other industry process. Each valid participant has a Market Participant Identifier (MPID) defined in Market Domain Data (MDD). MDD will be replaced by revised or new standing data which is referred to as Industry Standing Data (ISD) in the MHHS Programme TOM design.

Market Segments

- The three Market Segments are:
The Smart and Non-smart (S)
- Smart Meters with Settlement Period level data available
- Smart Meters with only Register Readings available
- Non-smart Meters with Register Readings
- Advanced
- Advanced Metering Systems with Settlement Period level data available
- Unmetered
- Unmetered Supplies.

Where MHHS terms are also defined in the schedules of the relevant codes, these are highlighted when you click through.

Programm... > MHHS Glo... > **Advanced Meter**

Term

Advanced Meter

Acronym

Enter value here

Definition

The electricity supply licence defines an Advanced Meter as electricity Meter that, either on its own or with an ancillary device, and in compliance with the requirements of any relevant Industry Code:
a) Provides measured electricity consumption data for multiple time periods, and is able to provide such data for at least half-hourly time periods; and
b) Is able to provide the licensee with remote access to such data.

See more

Related Term

Enter value here

Other Codes

REC

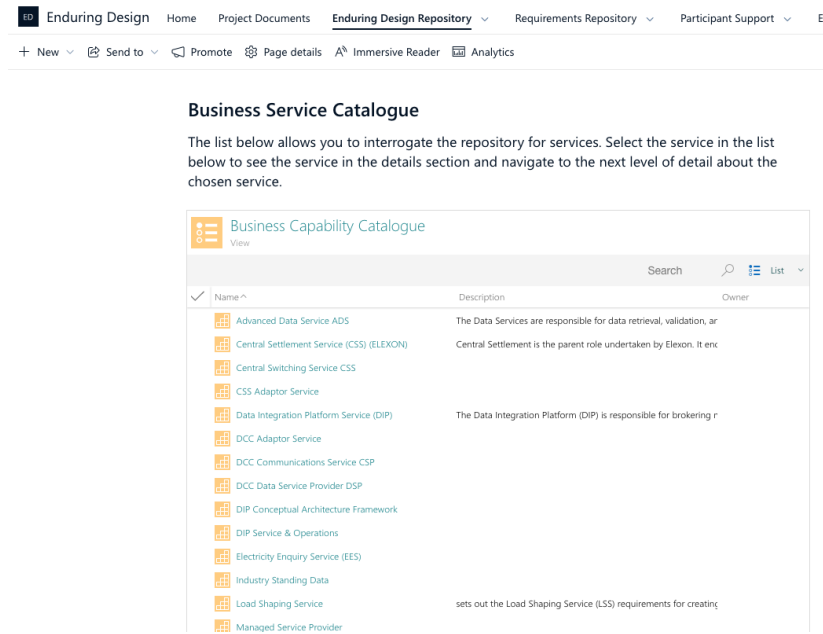
Codes referenced:

- BSC – Balancing and Settlement Code
- CUSC - Connection and Use of System
- DCUSA – Distribution Connection and Use of System Agreement
- REC – Retail Energy Code
- SEC – Smart Energy Code

The MHHS Programme are using design tools to support the assurance of the design content. Participants will get access to these resources in the coming weeks (with support and guidance).

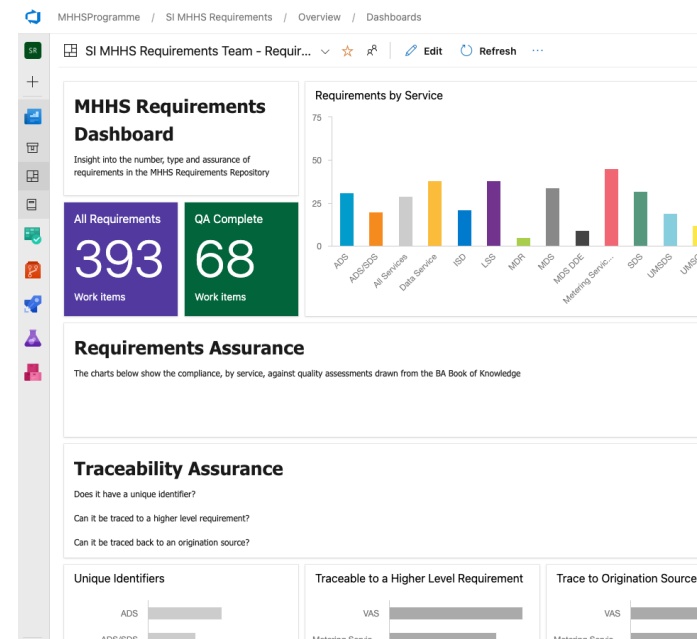
Enterprise Architecture Repository

The MHHS design modelled for business, application, data, technology and other views in the iServer365 product, which makes the design navigable and traceable by user and domain



Requirements Repository

The MHHS requirements captured in Azure DevOps to support flexible traceability and creation of test plans, cases, scenarios



Other Playback Sessions

MHHS Design Playback Plan on a Page

🚩 All Design Artefacts Issued for review

🚩 Comments to L4 Working Groups opens

🚩 Comments to L4 Working Groups closes

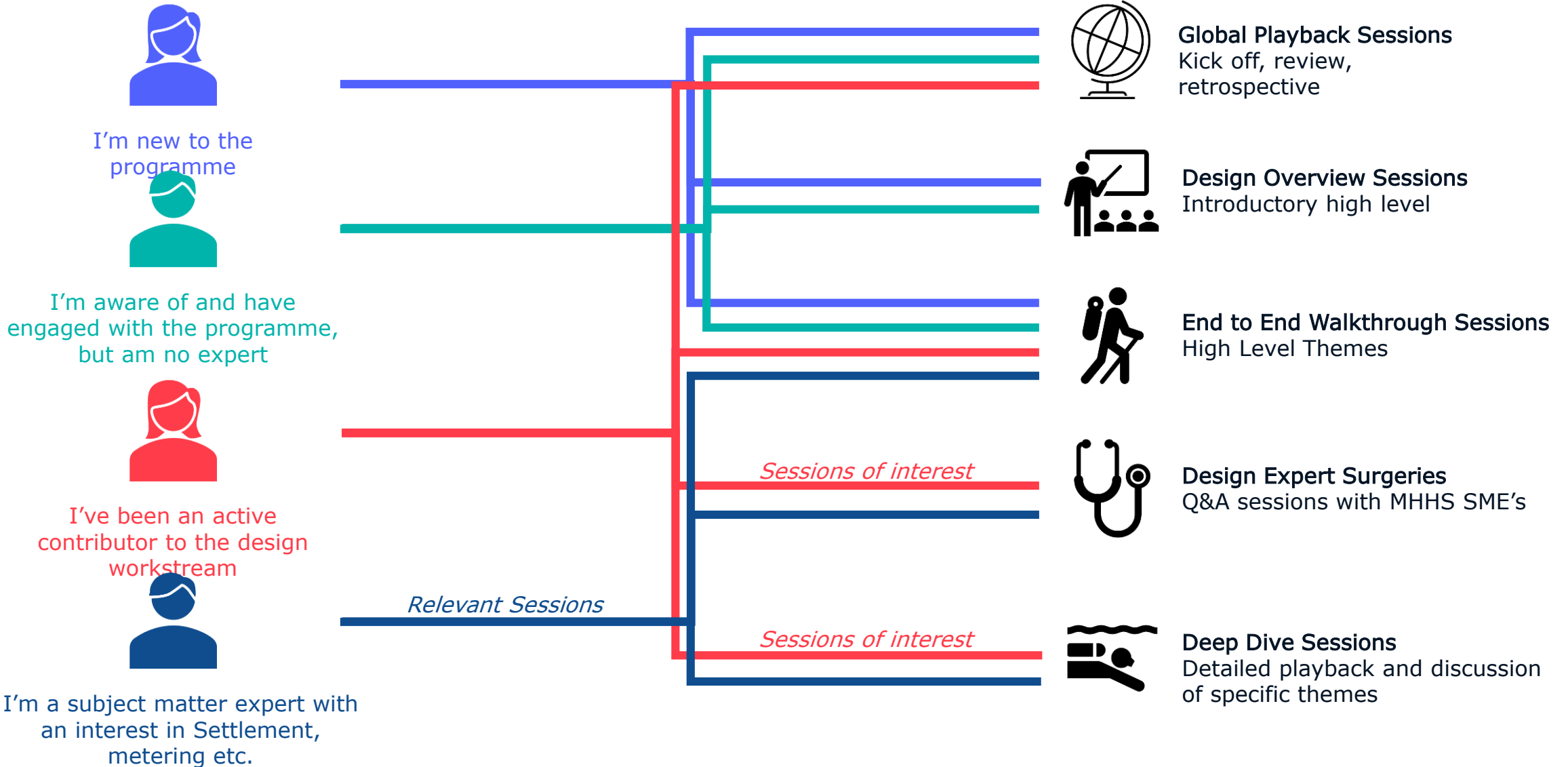
🏠 MHHS Open Day

	1 Aug	8 Aug	15 Aug	22 Aug	29 Aug	5 Sep	12 Sep	19 Sep	26 Sep
Design Overviews <i>Playback plan & design introductions</i>	Playback Intro & Plan <i>Kick Off & Signposting</i>	Design Overview <i>For new participants</i>					Playback Review & Deep Dive Plan <i>To review feedback, key themes and agree Deep Dive</i>		Retrospective & Next Steps <i>Review of activity - observations and outputs, recommendations for ongoing engagement post M5</i>
E2E Walkthrough <i>Playback of business processes and architecture/security content</i>		E2E #1 E2E #2	E2E #3 E2E #4	<p>The End-to-End design walkthrough sessions by the design SMEs cover the following themes:</p> <ol style="list-style-type: none"> 1. Design overview and introduction – DIP basics, approach to testing 2. Meter to Bank – Data Collection, Data Processing, new Elexon services (MDS, VAS), Consumption amendments 3. MPAN ownership – Change of Supplier, Change of Service Provider, Connections, Linked MPANs 4. Metering Changes – Change of Meter, Change of Segment, Energisation, Disconnection, LDSO 					
Design Surgeries <i>Drop-in sessions with access to design SMEs</i>					Design Surgery <i>Technology Settlement</i>	Design Surgery <i>Registration Metering</i>			
Design Deep Dives <i>Subject specific replays of design topics</i>			Technical Deep Dive Unmetered Deep Dive	Settlement Deep Dive Advanced Deep Dive			Responsive Deep Dive(s)		

✅ <https://www.youtube.com/watch?v=JNDWbt3vUtg>



Which Sessions Should I Attend?





**MHHS
PROGRAMME**
Industry-led, Elexon facilitated

Any questions?
Please join at [Slido.com](https://www.slido.com)
#MHHS
