

# MHHS Design Q&A

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## 1. Questions on Code Bodies

### 1.1 Code Bodies

#### Q1. Does the Design cover all the relevant codes?

The Programme is Design-led, rather than Code-led. The plan is for the five regulatory code bodies managing codes impacted by MHHS, to undertake drafting of the changes to their codes once the Design has been agreed at the M5 milestone.

The Programme has been working with the code bodies since the start of the Programme, and details of the proceedings are visible on the [Programme website under the Code Governance section](#).

#### Q2. How will the Programme approach the implementation of BSC P1558?

Any industry change that impacts the Design baseline will be assessed by the Programme and may require a Change Request to be raised to reflect any required change to the Design Artefacts.

### 1.2 The Balancing and Settlement Code (BSC)

#### Q3. How will the Programme approach BSC P502 after the Advanced Data Service (ADS) go-live?

The approach will be defined in the Code drafting work after the Design has been approved (M5). It is assumed BSC P502 will apply to pre-migrated MPANs and a new BSCP will apply to migrated MHHS settlement MPANs.

## 2. Questions on Data and Dataflows

### 2.1 Adaptor Services

#### Q1. Can participants use adaptor services for the MHHS Programme?

Yes. The Programme does not wish to deter participants from using their discretion regarding how they approach the market. Ultimately, the Supplier is responsible for delivering the requirements as per its obligations.

### 2.2 Data and Consent

#### Q2. What is the procedure for a domestic consumer who withdraws their consent for half-hourly data access, having initially provided it?

The customer will need to contact their supplier and advise them of a change in consent. The supplier will then notify this change to the Registration Service, using (IF-025) who will then update the other interested parties (PUB-026), principally the Data Service who will then adjust their recovery of data accordingly. Historic data recovered whilst consent may have been in force will remain and will not be deleted because of the change in consent. Suppliers should also advise the customer it may take 24-48 hours for the change in consent to take effect. Any implications a change in consent may have on tariff / product applicability will be for the supplier to discuss and manage with the customer when dealing with the Change of Consent Request.

**Q3. How will the proposed consent change for domestic customers be handled and processed by the Meter Data Retrieval (MDR) service?**

Within the Design, the Programme has specified an interface that will update consent with the Smart Data Service (SDS), which will, in turn, update the MDR Service.

## 2.3 Data and Dataflows

**Q4. Will data flow D0275 be replaced by new flows through the Data Integration Platform (DIP)?**

This is yet to be decided by the Programme. For more information, please see the [Dataflow and Interface Document](#).

**Q5. Will the Programme provide a list of data flows, outlining when are being removed, retained, and replaced?**

The Programme has received a great deal of feedback outlining the importance and utility of such a document. The Design Team is currently documenting this, and we will update Programme participants when it is published.

**Q6. Is the Programme using the old names for the dataflows, or the new names which have been set out under the Retail Energy Code (REC)?**

The Programme is using the names as set out in [the Interface Catalogue](#).

**Q7. Will the Programme publish a machine-readable scheme for the new interfaces?**

The Programme is looking to make a machine-readable scheme available on a Swagger platform. We will be taking the interfaces and putting them into our enterprise architectural repository, iServer, and will be making that available in the next few weeks.

**Q8. How will a Programme participant subscribe to IF021?**

This question was covered in more depth in the [Deep Dive: Technical](#) session.

**Q9. Will Data Collectors (DCs) publish reads immediately to participants subscribed to the dataflow, or is the publication delayed in line with existing schedules?**

This schedule is outlined in the [Operational Choreography document](#). Once the data has been validated internally, it will need to be published immediately to Elexon Central Systems.

**Q10. Is the Smart Data Service (SDS) equivalent to the Data Processing component of the current Data Collector role?**

The non-half hourly (NHH) Data Collector (DC) role will be removed after the transition. Elexon Central Systems will only receive half-hourly data. This data will either be HH data, collected from smart meters, or the SDS will utilise the load shapes to convert the daily reads into HH.

**Q11. Is the Smart Data Service responsible for sending the half-hourly (HH) consumption data to respective parties, including Suppliers, HH Data Aggregators (DA), and Licensed Distribution System Operators (LDSOs)?**

Yes, regarding Suppliers and LDSOs, however this does not apply to HHDA as it will no longer exist. This role is the Market-wide Data Service. The Data processing service is responsible for putting those messages onto the Data Integration Platform (DIP). Programme participants will then subscribe to receive these messages through the DIP. The expectation is that the Supplier will have processes in place to compare and reconcile the HH data copied to it from the Smart Data Service (via PUB-021) to ensure alignment with its own consumption records.

**Q12. What is the difference between IF021 outbound from the Advanced Data Service, and the data which is subsequently published to the Supplier PUB-021 via the Data Integration Platform (DIP)?**

The only material difference between the two is that the publication coming out will have transaction IDs that the DIP will apply to it. The data itself will remain the same.

**Q13. If the data is above the maximum permissible value, can it be marked as valid? Or can it only be rejected and estimated over?**

In the current design, meter data will be rejected if it is over a permissible value. The permissible value is very large so it would be considered as an error. If necessary, it could be raised as a Trading Dispute.

**Q14. Can a supplier interact directly with the Smart Data Service (SDS) to get the register-level readings required for billing both smart and traditional meters?**

Suppliers will be expected to obtain their own data from the meter for billing purposes. The SDS will get data for settlement purposes. The supplier should then compare and reconcile the two. For traditional meters, the SDS will recover reads and use them to determine the half-hourly consumption, and forward this to the supplier for billing purposes.

**Q15. In the Smart Data Service (SDS), will all other tariffs and therefore Standard Settlement Classes (SSCs) no longer be required, as all meters will be two-rate?**

Not all meters will necessarily be two-rate, as they can be configured whichever way the participant wants, depending on the meter functionality. However, we will only need the half-hourly (HH) profile data for settlement purposes.

**Q16. How will the Smart Data Service communicate validation failures back to the Supplier?**

This will be communicated through IF-021.

**Q17. Has the Programme outlined a process to notify a supplier when a D0010 has been withdrawn or replaced?**

Yes, this can be found in the [Data Processing](#) Design Artefact. The SDS will advise a supplier when it intends to disregard a D0010 (field acquired or Supplier provided) because it does not pass the validation described in the SDS Method Statement. For example, this could be where a reading does not align with previous meter retrieval history.

**Q18. Could HH data be centrally stored and accessed as required, negating the need for each party to have local stores?**

The Market-wide Data Service provided by Elexon does have all the half-hourly meter data. However, there isn't a requirement at present to provide this data to each party on request.

**Q19. Can the Programme provide class diagrams to complement the Data Catalogue?**

Yes, this can be found in the [Logical Data Model](#).

**Q20. Where does the Programme set out the processes for Trading Disputes under the Market-wide Data Service (MDS)?**

Trading Dispute process will be defined after the baseline of the design documents in the Code Drafting work. However, there is a process issued for [Consumption Amendments](#) which will provide additional detail.

**Q21. How does a Report (REP) differ from a Publish (PUB)?**

PUBs are transactional outbound messages from the DIP, usually related to an update event or in response to/following on from a previous message exchange. REPs are reports i.e., non-transactional – the Programme believe it was important to make a distinction between the two.

**Q22. Will the Market-wide Data Service expect a receipt of zero values from a de-energised site?**

Yes, and it will report back if it receives data for an MPAN that is de-energised to the Smart Data Service and Supplier in IF-014.

**Q23. Will Programme participants get D0010s for all MPANs in the smart segment?**

This will depend on the circumstances. The MHHS Design has the expectation that actual data will be available for Smart Meters most of the time – but the design does allow for the exchange of a Cumulative Reading(s) as a backstop in some circumstances using IF-041/PUB-04 over the DIP. For non-smart and traditional meters, the exchange of readings will be using the D0010 (via the DTN).

**Q24. Can the Programme provide more information on the changes to estimation and validation which is defined in Appendix 4 of the BSC P502 required for the Advanced Data Service role?**

The estimation and validation requirements are set out the [ADS Method Statement](#).

**Q25. What are the changes to the D0300 process?**

There are no changes to the D0300 process because of MHHS Implementation. However, several participants have suggested that in the light of Faster Switching, coupled with the proposed changes, there should be a 're-visit' of the D0300 process so see if all elements of it are still fit for purpose. This is wholly a matter for RECCO, to take a view on if this should be included as part of the Consequential Change package.

**Q26. How does D0071 operate under the new Design?**

This has been replaced with D0010/[MHHS-IF-041](#).

**Q27. In the case of an emergency disconnection, do parties still receive a D0125?**

No this has been replaced with [MHHS-IF-009](#).

**Q28. Will the D0155 for appointing agents be replaced?**

No this has been replaced with various interfaces please refer to [BPM002/BPM003](#).

**Q29. Will the D0205 still be utilised as the Programme is heading for D0095 or D0235?**

No, the D0205 will be redundant. There will not be any D0095s going forward. As Registrations is the master of the Data and any update is published to all parties there will be no requirement for a D0205. Suppliers can use MHHS-IF-025 to update certain items. Please refer to [BPM010](#) for the items supply can update.

**Q30. What happens is a supplier is not MHHS ready? Does the registration service revert to the traditional D0217/D0260 process?**

We are currently working on transition so that has not yet been agreed fully, but we have highlighted this may have to revert to D0217/D0260 for non MHHS COS.

**Q31. Will D0217 be retained?**

For MHHS ready COS the D0217 will be replaced by [MHHS-IF-001/MHHS-IF-002](#)

**Q32. Will the standard data Charge Code/Switch Regime (CC/SR) remain in the D0269/D0270 dataflows?**

No, this data will be in the Industry Standing Data. Customers will be able to access the data in a similar way as currently provided.

**Q33. What is the difference between IF-115 and IF-120?**

IF-120 is the version of the DUoS Report that provides the data for Suppliers on embedded networks to the host LDSO.

**Q34. How will requests for D0268 and D0215 be sent if D0170 is being replaced?**

There will be a trigger in place which will come from another Dataflow or Interface, and participants will not need to ask for them.

**Q35. How will historic data be exchanged with IF016 and D0275?**

The consumption Interfaces are modelled on the higher resolution version of the D0275.xzcvzsdfigs

**Q36. Will D0142 be replaced?**

Replacement was originally in scope but was ruled out after discussions in BPRWG. If you feel this should be revisited, please feedback in the comments review process.

**Q37. Should parties expect flows from the DIP and the DTN for Trad-Smart Exchange in relation to BP09?**

Yes. The core of the metering information is contained in the RS. For Smart, the RS furnishes meter technical details. For Traditional meters, parties will get two sets of data. One from the RS and one from D0149/150 with registration and TPR information.

**2.4 The Data Integration Platform (DIP)**

**Q38. Will the DIP take over all Half-Hourly (HH) data feeds from the Data Transfer Network?**

All settlement information will move to the DIP.

**Q39. When will the DIP's Public Key Infrastructure (PKI) service be clarified?**

The Programme will be able to provide more detail on the Public Key Infrastructure (PKI) service once we have concluded procurement of the DIP. This is scheduled to be resolved towards the end of 2022.

**Q40. What is the lowest level of data granularity that the DIP will hold?**

The granularity of messages moving across the DIP is defined in the [interface specification document](#) found on the Collaboration Hub. The DIP will hold auditing data for all activities undertaken by the DIP, and this will be available via the DIP user portal, which will be determined via the DIP procurement process. The contract to the DIP service provider has not been awarded yet.

**Q41. What is the Programme's estimate of the typical volumes of data that a Supplier will need to process?**

This will depend on the portfolio size of the supplier. The interface with the largest volume will be IF-021, and we are estimating, on average, a message for every smart meter every day.

**Q42. Will it be mandatory to interface with the DIP?**

The intention is that all interfaces defined by the MHHS Programme shall be communicated via the DIP.

**Q43. Will the DCC interface directly with the DIP, or with the Smart Data Service (SDS)?**

The Programme is not changing any DCC interfaces, smart metering will continue using DCC User Interface Specification (DUIS) service requests, and switching will use Central Switching Service (CSS) webhooks.

**Q44. Does the Design indicate that a load balancing approach will be taken when the DIP undergoes maintenance?**

This will be determined through the DIP procurement process. The contract to the DIP service provider has not been awarded yet. While that is going through an assessment, the types of solutions vary at present.

**Q45. What are the data retention rules for the DIP?**

The DIP will retain data for 14 working days and that will enable parties to come back and do a replay of that message. Archiving data is expected to be retained for two years.

**Q46. Will third parties be able to access the DIP to access consumption data?**

Third parties will only be able to access consumption data if they have a right to receive it.

**Q47. Can the DIP notify Programme participants of new or changed events that they might be interested in?**

The DIP does not contain any business logic other than that required to route messages to participants. It is envisaged that participants may subscribe to message channels via webhooks, and this will push the subscribed information to them based on their role and rights to receive that information.

**Q48. What is the charging mechanism for the DIP?**

This is still to be decided.

**Q49. Will parties that are not connected to the DIP be able to access the Industry Standing Data (ISD) as they can for the Market Domain Data (MDD)?**

Yes, this will be accessed via Elexon Hosting Platform, for more information please see the see [the Industry Standing Data design artefact](#).

**Q50. What flexibility will the Programme build into the subscription service?**

This question was covered in more depth in the [Deep Dive: Technical](#) session. In short, there will be validation rules to ensure that Programme participants are entitled to the data they are subscribing to.

**Q51. Who will own the Data Integration Platform (DIP) catalogue, and how will changes to messages be agreed, versioned, and communicated?**

The ownership of the DIP has not yet been finalised, and this is a decision for Ofgem. It will be a decision for the future owner of the DIP as to how changes will be agreed, versioned, and communicated.

**Q52. When will the DIP be available for testing by participants?**

Testing will be available after the DIP service provider has been onboarded. Participants should refer to the [replan documents](#) for more information.

**Q53. Has the Programme considered the operational and cost implications of the DIP and DTN co-existing at the same time?**

This is something that the Programme has considered and is aware of. It will issue more communications on this in due course.

**Q54. How will high message volumes be managed?**

The volume of messages that we are expecting are not high by modern values and will be within the ability of all potential DIP solutions which are being considered.

**Q55. Will there be a specific penetration test of the DIP?**

Yes. The requirements indicate that there will be annual DIP penetration testing, in addition to continuous vulnerability scanning.

**Q56. Who will run the Public Key Infrastructure (PKI) for the multiple Transport Layer Security (mTLS) authentication?**

This is something which the Programme is exploring as part of the DIP procurement process. All service providers have been asked to provide certificate services as part of the RFP. The Security Design Working Group (SDWG) has discussed this. The Programme is also analysing what has been done in the Faster Switching Programme in relation to their PKI policy.

**Q57. How will resilience and recovery from planned or unplanned outages be managed?**

The Programme has outlined very specific requirements for the DIP regarding Return to Operations (RTOs) and Recovery Points Objectives (RPO). The RTO is at sixty minutes, which is achievable with modern cloud architecture. All providers who are bidding for the DIP can meet these requirements.

**Q58. What message volumes and timings will technical and functional tests reach?**

This has yet to be defined by the Programme. Our original scope is for 50 million messages per day, with 1000 messages per second at peak load. These messages will be predominately half-hourly settlement messages.

**Q59. Will Pattern B only be used for distributing the Industry Standing Data (ISD) initially?**

Pattern B will be used for the ISD, but ISD will be made available on the Elexon Website for people to download. Other messages will be transmitted over Pattern B, such as the Load Shaping Service (LSS).

**Q60. Would PKI/certificate-based authorisations be Market Participant ID (MPID) specific?**

It would be MPID specific, and environment based. A participant would have a range of certificates, including for proxies. Each environment will need a different certificate.

**Q61. Are there alternatives to Webhooks for channels with a high number of messages, such as MPAN consumption?**

Once the Programme has a DIP service provider, the Programme will be providing alternative mechanisms to connect for more high-volume channels.

**Q62. Will there be an API in place for registering and unregistering new Webhook subscriptions, or can this only be achieved through the UI?**

This decision will need to be made once the DIP service provider is chosen and onboarded.

**Q63. Where is the subscription service described?**

This is described in the Swagger definitions, which are currently being created. Once finalised we will be able to share more.

**Q64. How will volumetric increases be managed, and how much further investment by needed to move to 15-minute intervals?**

Any volumetric increase would require an increase in messages on the DIP. A move to 15-minute intervals would involve a doubling of the payload size. We would receive 96, rather than 48, values in a day. The number of messages would present a bigger challenge than the volume of the payload itself.

**Q65. Will the DIP provider be applying NIST/ISO27001 policies, and will these be monitored and reported on for compliance?**

The DIP provide will be ISO2700. The requirement is that they meet ISMS requirements, and the Programme will be checking their documentation and processes against this.

**Q66. If a message property is optional, should it always exist in the message, even where the value can be null? Or should the property not be included at all?**

This is currently being discussed by the Programme. We will issue further guidance in due course.

**Q67. How will valid participants and services for each message be communicated?**

Participants will have a Market Participant ID (MPID) which differs from their DTN ID. The Programme is hoping to produce a mapping of DTN IDs to DIP IDs.

**Q68. Does the Programme's assumption of a peak of 50 million messages a day apply even if suppliers don't use a Meter Data Retrieval (MDR)?**

No. The meter reading still needs the Central System Settlement which will need to go via the DIP.

**Q69. How will refinement and clarifications be presented to industry after the procurement of the DIP?**

This is yet to be decided. However, the Programme will work closely with all Programme participants to ensure our communications and engagement clearly outline any refinements and clarifications required.

**Q70. How would the DIP failover work if the primary UK regions fail?**

After discussions with the Testing Working Group, the Programme removed an original requirement for a full Disaster Recovery (DR). A single availability region within the UK would provide the required resilience, whereby services would be replicated across availability zones. Model cloud architectures have one available region, typically UK South, and three availability zones where services are replicated.

**Q71. Will MPIDs be mapped directly to the BSCCo MDD?**

This is currently under discussion with the Programme, and we will update in due course.

**Q72. What is the case for using a participant proxy?**

Participant proxies are useful in the case where a participant has several roles within the MHHS TOM and has disparate IT systems. Participants, in this case, may want to operate their systems separately under one market role.

**Q73. If the Webhook push fails, what is the retry mechanism?**

There will be an exponential back-off with retry mechanism.

**Q74. When requesting a resend, will only entire messages be sent?**

We expect that participants will be able to request a replay with message channel, start time, end time, or a message sequence. They will also be able to filter by MPAN.

**Q75. Is there an option to receive alerts to a different URL if a message goes on a Dead-Letter Queue (DLQ)?**

If a message goes onto a DLQ, participants will receive an alert from API.

**Q76. Is the DIP for message queues only or can it be used for files?**

Yes, the DIP is principally a message exchange service. However, in the case of files like ISD or reports these will be placed on a file hosting service and the DIP will send a message containing the URL where the file can be downloaded from.

**Q77. What happens to the DTN flows during the parallel running phase?**

As things stand the DTN will continue to operate alongside the DIP, with D-Flows being transferred via the DTN and new MHHS messages via the DIP.

**Q78. Is it mandatory to establish connectivity to the metering service for dataflows?**

Yes, the current MHHS Design means that a Metering Service would need to exchange both MHHS Messages via the DIP and D-Flows via the Data Transfer Network depending on the process. The same would be true of Supplier interactions with their appointed Metering Service(s).

**Q79. Will suppliers need another adapter to communicate with the Data Integration Platform (DIP)?**

That's a decision for each Supplier to make for themselves. All participants (Suppliers/Data & Metering Services) have the option of either exchanging new MHHS Messages *directly* with the DIP or via an integration/adaptor service.

**Q80. Who will own the Data Integration Platform (DIP) catalogue, and how will changes to messages be agreed, versioned, and communicated?**

The ownership of the DIP has not yet been finalised, and this is a decision for Ofgem. It will be a decision for the future owner of the DIP as to how changes will be agreed, versioned, and communicated.

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Testing will be available after the DIP service provider has been onboarded. Participants should refer to the [replan documents](#) for more information.

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If a message goes onto a DLQ, participants will receive an alert from API.

**Q105. If the response sent by the DIP to Webhooks are erroneous, how can market participants respond asynchronously?**

This is covered in the End-to-End Solution Architecture document. If a message is received by Webhook and an error is detected, the DIP can know where to send the message back to sender with error details.

**Q106. What happens in the case where a subscribing party is not available to receive a message from the DIP?**

It will be held in a queue until the receiver can receive it. This is covered in the End-to-End Solution Architecture document. It will adopt a simple back off and try mechanism and the messages will be stored in the queues.

**Q107. What is the difference between a Publication, a Report, and an Interface?**

Interface: When a sender sends a message or event through the DIP.

Report: A more generic term referring to reports produced by the DIP for reporting purposes.

Publication: When a message is sent from the DIP to a receiver.

**Q108. Does the DIP store data? IF015/016 demonstrate how the DIP can leverage its store of message history to replay the consumption data for the ADS.**

Yes, the DIP does store data.

**Q109. How will the DIP support performance monitoring?**

This will be addressed in the next level of Design once the DIP provider is chosen and onboarded.

**Q110. How will the use of soft and hard limits work to encourage data to be spread across the day?**

This is specific to the submission of the HH consumption data. We are encouraging Programme participants to spread the load of the day, and this can be enforced through API Gateways.

**Q111. How will digital certificates be issued and managed for participants?**

This will follow the work of the Faster Switching Programme in terms of how they managed and issued digital certificates.

**Q112. Will the DIP integrate with the DTN for the retain Dataflows or is this the participants' responsibility to send both?**

The DIP and DTN will coexist. Programme participants will need to send DIP interfaces via the DIP and send retained dataflows through the DTN.

**Q113. Can a participant opt-out of HH data for MPANs which are billed using D010 register readings?**

No, participants will not be able to opt-in or opt-out.

**Q114. In the case where positive processing is not replayed to a sender, how will system issues be resolved?**

If the DIP cannot accept a message for onward processing, an error response will be provided. Programme participants will not be in doubt regarding the success of the message. In addition, there will be a support service which will help participants to understand the reasoning behind an error message.

**Q115. Where a 3rd party is used to process DUoS billing, will the 3rd party need the service of a DIP connection provider?**

This might be the case, but the Programme cannot definitively state. We would ask that any participants in this case reach out directly with the precise scenario so that we can advise.

**Q116. Will the DIP use AsyncAPI?**

The DIP will only use OpenAPI Rest v3. This was chosen by the Technical Design Working Group in 2021. AsyncAPI applies more to Event rather than Message. Message based integration works better for the purposes of MHHS.

**Q117. Will the DIP send a message when data is received successfully by the DIP?**

When a sender sends a successful message through the DIP, they will receive a handshake message with a transaction ID.

**Q118. Regarding replays, what is the process for missing flow scenarios where the receiver is not expecting a message?**

This is not a scenario that the Programme is envisaging. The mechanism for replay will be an API call or messages which would be replayed by the API.

**Q119. Which message broker will the Programme use?**

This is still to be decided as we are still in the procurement process.

**Q120. Has the Programme considered the increase in DIP interactions when migration is carried during the transition period for NFR calculations?**

We do not see this being an issue, and do not envisage a large increase in DIP interactions to the point where the DIP would not be able to handle them.

**Q121. Can the end consumer access their HH data through the DIP?**

No. To access to the DIP you will need to be a BSC party. However, participants could build in this functionality on their own systems to give consumers access.

**Q122. Are there provisions in place to prevent spamming to the DIP?**

Yes. The Programme has a multitude of technology in place to stop any form of Distributed Denial of Service (DDoS) spamming.

**Q123. Will participants be able to reject an inbound message using the validation messages?**

Yes, participants can use validation messages to reject messages.

**Q124. Are there any rules around which messages sent and received via the DIP can be grouped together.**

There are no restrictions on this. Messages can be grouped as PPs feel fit to do so.

**Q125. Will there be Health Status Monitoring or API provided?**

The Programme is in the process of defining these. They will feed into the contract for the DIP Service Provider.

**Q126. Where the MDS successfully processes data, how is this positively acknowledged back to the sending supplier?**

There is no formal acceptance of the data from the MDS. The supplier will receive acknowledgement that it's been accepted by the DIP. If no error message is received it can be assured that the consumption data has been accepted into the MDS.

## 2.5 The Logical Data Model

**Q127. Is the Logical Data Model (LDM) aligned with the DCC/RECCo?**

[The LDM](#) was published on the 22 August 2022. We will provide additional information to participants which we will cover in a future Design Playback session.

**Q128. Can the Programme please share the LDM?**

This has now been published and is available in the [Support Documentation section on the Design website](#).

## 3. Questions on Design

### 3.1 General Design

**Q1. Why does the Target Operating Model (TOM) show DCC Adaptor Service representation in both the Supplier and Smart Data Services blocks?**

The TOM illustration shows DCC Adaptor Services for all parties that might interact with the DCC Data Service Platform using the DCC user interface specification (DUIS) Service Requests – e.g.,

Suppliers, Distributors and the Smart Data Service providers who will be acting in the new DCC Meter Data Retriever user role.

**Q2. Can the Programme provide an architecture diagram to represent what is being replaced by the Programme?**

The Programme doesn't currently show what is being replaced. When the code drafting work starts, participants will see the manifestation of the Design in the code drafting documents as well the old documents and the new documents.

**Q3. Can the Programme produce high-level descriptions and diagrams which show the services from an input and output perspective?**

This is something that the Programme will take into consideration. However, it may be impacted by resource considerations.

### 3.2 Design Operations

**Q4. Where do Distributed Use of System (DUoS) billing and customer invoicing services sit within the Target Operating Model?**

For reactive power, data will come out of the Advance Data Service (ADS) and the license distribution operators will be subscribing to those publications. Otherwise, the data will go into Elexon. Elexon will aggregate the data and provide DUoS reports by a DUoS tariff ID. Currently, the half-hourly Data Collector sends meter data to the distribution business for the site-specific DUoS billing, and Elexon Central Systems sends a DUoS report for aggregated DUoS tariffs. In the new world, the ADS will send the data, and distribution businesses perform their site-specific collecting from that data and from all the other DUoS tariffs that will come from an Elexon central settlement service.

### 3.3 Operational Choreography

**Q5. Within the Operational Choreography artefact, what does 'D' refer to?**

'D' is the datetime by which data is expected to be provided to ECS Central Systems to make the II Runs.

### 3.4 Non-Functional Requirement (NFRs)

**Q6. Can the Programme provide any estimations around NFRs?**

The non-functional requirements (NFRs) are included in the Data Integration Platform (DIP) specifications and [E2E Design Artefacts](#). They provide information at a more holistic level, not at a participant level.

**Q7. How can suppliers derive the volumetrics and NFRs that will be relevant to them from the End-to-End NFR documents provided by the Programme?**

In the End-to-End Requirement spreadsheet, Column G identifies whether a requirement is relevant to all participants. Some NFRs are more targeted. The Programme has not provided guidance on

volumetrics so far. Some early estimates indicate that, regarding HH data, 95% of volume will run through the DIP.

**Q8. Will the Programme create collated requirements for Data Services and Metering Services?**

These have already been published and can be found in the Collaboration Base and the MHHS Website.

### 3.5 The Advanced Data Service (ADS)

**Q9. Will the Advanced Data Service replace the Half-Hourly Data Collector (DC)?**

The ADS does replace the half-hourly DC but that does not preclude existing half-hourly DCs qualifying as an ADS and using their existing half-hourly systems. In transition half-hourly DCs will service pre-migrated MPANs and the ADS for migrated MPANs for advanced meters (this may be the same organisation qualified in both roles under the BSC).

## 4. Questions on Metering

### 4.1 General Metering

**Q1. Do traditional Half-Hourly (HH) meters fall under the Smart or Advanced sections of the Target Operating Model (TOM)?**

Traditional HH meters fall under the Advanced section of the TOM.

**Q2. Will the Smart Data Service (SDS) qualify as a User under the DCC to access smart meter read data?**

Qualification for the SDS will be defined under the newly created Qualification Working Group. If you would like to attend the Qualification Working Group, please email [PMO@MHHSProgramme.co.uk](mailto:PMO@MHHSProgramme.co.uk)

**Q3. Will the Programme remove the limit on meter readings for pre-payment meters?**

There will be no limit on meter readings for pre-payment meters.

**Q4. What will happen to traditional metering and intermittent polling metering under the new Design?**

What happens with advanced meters that have Current Transformer (CT) but are non-communicative is currently an open question. Ultimately, the view is that if they are non-communicative, they will be moved into the advanced segment. They might require half-hourly read or an eyeball cumulative read and estimate.

**Q5. Will there be a requirement to obtain Time of Use register readings from advanced meters in the C, E and G profile class?**

The C, E and G profile classes will be removed. The load shaping calculations are all based on cumulative reads and not Time of Use reads. The registration service will contain a connection type indicator which will show if it is whole current, low voltage current transformer (CT), high voltage CT

or extra high voltage CT. It will also contain a domestic premise indicator which will allow participants to group customers to an equivalence of C, E and G profile classes

**Q6. What will happen to Long Term Vacant (LTV) metering points?**

There are two mechanisms by which LTV sites might be managed. The first would be for the Supplier to set the “LTV flag” with the DS using [IF-045](#) – per the [SDS Methodology Statement](#) - this would cause the site to get zero consumption allocated to it, unless there was actual data showing consumption was received. A second, possibly more appropriate option, would be for the Supplier to set a Supplier Nominated Annual Consumption again using [IF-045](#). This could be useful if there will still be some minimal energy usage at the site. Any LTV flags currently set with the ‘old world’ DC would need to be ‘re-applied’ using [IF-045](#) on transition to MHHS, or on the first appointment of the SDS.

**Q7. What is a cumulative register reading, and in what scenario is a Supplier required to send one?**

All smart meters have a “Cumulative” or “Total Usage Register” alongside the individual period registers. It is anticipated that the Cumulative Register reading would be used in fallback situations. For example, on an exchange, the SDS/Supplier could then use the Cumulative Register reading at the point of exchange & compare this to the Cumulative Reading recovered at midnight the previous day, to establish the usage between the two points. There would be a requirement for some ‘allocation’ of that usage across the HH Settlement Periods – this could be done either in line with that customer’s historic usage pattern(s) or using the appropriate Load Shape(s).

**Q8. How are secondary meters participating in P375 identified for Balancing Mechanism Units (BMUs)?**

This is described on [the Elexon website](#).

**Q9. Are asset meters catered for by P375?**

This is described on [the Elexon website](#).

**Q10. Where do Metered Volume Reallocation Notification (MVRNs) sit within the Design?**

These are not impacted by the MHHS TOM and therefore not covered in the design. For information on MVRNs see [the Elexon website](#).

**Q11. Where are traditional meters and register readings represented on Process Map?**

[Please refer to BP009](#) – Steps 75 and 80 cover the movement of data for Traditional and Advanced Meters.

**Q12. Is a supplier mandated to use the Smart Data Service (SDS) for a smart meter?**

Yes, a supplier will be obligated to ensure that they have an appropriate Data Service & Metering Service appointed for each MPAN for the entire period of their ownership/responsibility for that MPAN.

**Q13. Do suppliers and SDS access the same meter via the Data Communications Company (DCC)?**

Yes.

**Q14. What is required to ensure that smart meter Time of Use (ToU) configurations remain standardised?**

This is an issue that the Programme has flagged to RECCO. The purpose of MHHS is to allow for the transition to a much wider range of ToU tariffs. SSCs will continue to be available and maintainable in the short to medium term. The Programme will continue to work with RECCO over the coming months to determine how this issue can be better addressed.

**Q15. Can a losing supplier dispute a closing meter reading?**

Yes, D0300 will continue to operate. Reference Design Artefact [BP003C](#) for more information.

**Q16. Will suppliers operate their own Meter Data Retrieval (MDR) function?**

This is a decision each Supplier will make in line with their own strategic objectives. The MHHS TOM allows for several different implementation and delivery models so it's possible that a Supplier may choose to operate as an MDR themselves; or procure this as service from a Third Party. Hybrid options are also possible, where Suppliers recover the HH Data put pass this to a third party (SDS) for validation/estimation and submission to Settlements.

**Q17. How will a customer's own read operate for non-communicating smart meters?**

In the case of Non-Communicating Smart Meters, the supplier can either request the SDS perform periodic actual readings, like they would a Traditional site; or Customer provided Cumulative Readings can be passed by the Supplier to the SDS.

**Q18. How will metering services receive passwords, etc. if the D0313 is redundant?**

D0313 is no longer required as data items contained in the D0313 are now exchanged in the D268. The D268 will be shared between Metering Services and Suppliers for sites in the Advanced Segment. Customer and PSR information will continue to be exchanged using D302/D225.

**Q19. What is the Programme's definition of premise as a means of identifying the metering service required?**

No changes have been made to the definition of a premise or the requirement to appoint a MOP/Metering Service.

**Q20. How does the outgoing supplier know if the meter service is halted or fails?**

The MHHS Metering Service will operate in the same way as MOPs do currently. Suppliers will be required to put in place commercial arrangements with Metering Service(s), and then follow the Change of Service Provider process, as seen in Design Artefact [BP002](#), to 'appointment' their preferred Metering Service for each MPAN. On the loss of an MPAN to another Supplier the Registration Service will automatically de-appoint the Service Providers – this will be confirmed to the Supplier through receipt of PUB-037 message.

**Q21. When a new connection is established, how does a supplier request installation of a new meter by the metering services?**

At the highest level, the New Connection process will proceed in the same way as it does currently. The Supplier will request MPAN creation via the LDSO, they will then 'register' the MPAN via CSS; once the MPAN is formally 'owned' by a Supplier a Metering Service can be appointed and the installation of metering arranged. For more information please refer to Design Artefact [BP-006](#).

**Q22. How will HH data be generated for MPANs without smart meters?**

Details on this can be found in the SMART and ADVANCED Method Statements. In situations where the customer has not given consent, the best data will be daily readings. These are then processed by DSP using the SMART Method Statement. Where we get monthly reads, or less, the SMART Method Statement describes the process for dealing with this.

**Q23. Who will own the smart device data post implementation?**

The MS is still the ultimate owner of the metering data, it will be housed in the RS and shared from there.

**Q24. Is there a means by which Service Providers can query registration notifications?**

Service Providers will need to contact the Metering Service to raise a query. Once data is clarified, the MS will then update the RS accordingly.

**Q25. Will there be an impact on GSOS calculation because of the change in BP7, BP8, and BP9?**

We do not envisage that it will. In each process the MS updates the RS in real time. The flows will contain the date on which the work is completed.

**Q26. How would industry treat a commissioned meter which is turned non-comms? Will it be seen as Trad or Smart?**

Trad and Smart meters reside in the same segment on the TOM so there will be little impact. However, as per the Programme's design principles, a non-comm Smart meter is treated as a Trad meter.

**Q27. Why does the RS send out the Smart MTD if the MS is the ultimate owner?**

Ultimately this comes back to the nature of the TOM. In general, there is a move towards holding data in central registration and decouples where the MS needs to update.

**Q28. Would a Change of Connection/Change of Segment always trigger an appointment scenario of SEG?**

This would depend on the type of Change of Connection and Change of Segment.

**Q29. Would a Change of Energisation message trigger a registration update message?**

They are not really connected. On the CoE site, you should receive the flows that relate to this. There will always be a DS and MS appointment regardless of energisation status.

**Q30. If there is a non-commissioned meter which is later commissioned, how would the industry treat this?**

It will be treated as Smart once the Comms is established.

**Q31. What data will participants receive for smart and traditional meters?**

This will be dependent on the context.

**Q32. Will new MDD Role Codes be created to differentiate them from the old MO role?**

This will be subject to final decision. Within the DIP there will be new PP codes and a DIP role. We are discussing internally the potential approaches for this, and we recognise that different parties will implement in different ways.

**Q33. Can MS qualify to only certain connection types?**

. This is still subject to discussion. Our agreed position is in the Advanced segment, we are not expecting metering services to qualify.

**Q34. When will the MHHS Performance Assurance Regime be developed and discussed?**

This is for the Code Bodies to discuss and define. The plan is that there is a window for assurance framework development.

**Q35. How is the lapsing of service provider appointments managed?**

This is more of a business need and is not included in the E2E document as it is specific to

## **4.2 Advanced Meters**

**Q36. What defines an advanced meter?**

For the Advanced meter definition, we are utilising the BSC definition.

**Q37. What is the process for non-comms AMRs?**

There should be obligations to ensure that comms is restored where it fails, and all reasonable steps are taken to get the comms working. Those which permanent do not work may need to be managed as traditional dumb meters.

**Q38. Is it possible for DS and MS to qualify in the Advanced segment for certain connection types only?**

This may be possible, but it will depend on trusting the supplier. It will need to be further discussed during the qualification discussion.

**Q39. What is the Programme’s source for the 1.2m Advanced meters figures?**

Some of this is based on an ECCOES extract made at the time of making the slides. There may be some margin of error in place here. However, it is reasonable to assume that there are between 900,000 and 1.2 million Advanced meters in place.

**Q40. Can an ADS use historic data provided by HHDC as a source for estimation after migration?**

HH to ADS transfer will be a one-off transfer. However, it will certainly make sure to use this data after migration if continuity allows.

**Q41. To whom do suppliers send MPAN BMU allocation requests?**

This will move to the MDS, where that layer is being used as an aggregator of data.

**Q42. Will the Programme publish a document which outlines what is being removed from the ADS service?**

This is something that the Programme will consider developing this type of document in the Enduring Design phase.

**Q43. Will BSCP205 be updated, and if so, when?**

Once the Programme moves into Code drafting, there will be a new series of BSCPs which will provide a single document to reference to for everything.

**Q44. Has the approach for the new MDD role codes been defined?**

This is a live piece of work which people in the Programme are currently working on

**Q45. How does the ADS know who to receive MTDs from for a Proposed Appointment?**

The registration appointment will triangulate all information. This is a two-stage process, where there is a provisional appointment driven by a chance of switch. The RS will hold all the data both old and new and will communicate this to the ADS.

**Q46. What is the relationship between Market Participant ID and DIP ID?**

This is currently being analysed by the Programme as part of the work on DIP participation.

**4.3 Metering Changes**

**Q47. Do suppliers need to change metering service when the agent has qualified for both simple and complex service propositions?**

The final decision on this is still to be taken, but current thinking is that from an MHHS perspective Metering Services will be qualified at a ‘Segment Level’, and the validation if a Service Provider is ‘appropriate’ will be performed at the Segment Level. Separately lower levels of qualifications for example LV vs HV vs EHV is subject to ongoing discussions within the REC. The MMHS solution could easily be extended to include Connection Type / Segment Level validation if required in the future.

**Q48. Is the disconnection PUB009 still issued even if the LDSO rejects disconnection?**

No, PUB-009 would not be issued if the LDSO rejects a Disconnection Request. LDSO would continue to use the existing D0262 to reject the disconnection request.

**Q49. Does the automated evaluation of market segment occur following prospective service provider appointments going live?**

Yes. Many of the initial validation checks are rerun at the point an appointment is processed from the queue.

**Q50. Where is the 2 working day and grace 5 working days documented and what performance assurance is in place to monitor these?**

This is documented in both the BP-Maps and the Registration Service Requirements. The Design Team have made several recommendations for new Performance Reporting. Performance Assurance elements of MHHS are still under discussion

**Q51. What is the process where the LDSO change to Connection Type is not received to the same timelines as Service Providers change to Meter Type?**

It is possible that Connection Type and Market Segment could be temporarily misaligned, this would only occur if one participant had failed to fully complete all the steps required of them as part of the wider Change of Connection Type / Segment process – for example if either the LDSO or the Metering Service had failed to submit their updates as part of that process. Ultimately it is the supplier's responsibility to ensure that an MPAN resides at a valid Market Segment, so the Supplier should be monitoring these processes and chasing any part that has outstanding activities. The Registration Service will issue reminders to the appropriate Supplier while these situations persist.

**Q52. Can a changing Energy Direction/Metered Indicator be initiated by Supplier only? Or can it be initiated by LDSO also?**

Energy Direction / Metered Un-Metered Indicator data items are both owned and maintained by the LDSO, albeit with direction/input from the Supplier. Both items would be set at the point of MPAN creation and only change in the case of an administrative error.

**Q53. If a supplier identifies an update to the Supply Address, do they notify the LDSO?**

We would need to double check on this as 'Change of Supply Point Address' is a CSS owned process. However, the Programme does believe the first point of contact for such a change would be the LDSO.

**Q54. How does a supplier know the switching times for an advanced meter site which was previously non-half-hourly without a D0150/D0149/SST/TPR?**

The Programme is going to issue a statement shortly to clarify the position & expectations around these sites. However, it is likely that Suppliers will be encouraged to enable half-hourly consumption recording on these meters, thereby negating the need to exchange D149/TPR information.

**Q55. Does PUB-018 go back to the LDSO to confirm that the Registration Service has accepted a proposed change?**

Yes, PUB-018 will be send to the LDSO should they wish to receive them

**Q56. How often will PUB-045 be made available?**

Expected that Reminders will be issued every 7 Days.

**Q57. Can Change of Connection Type be completed for a date in the past?**

Connection Type will also be updated retrospectively but expectation is that this would be completed in a period of days. For data inaccuracy for example, if it is discovered a Connection Type has been set incorrectly then it would only be updated from the date the mismatch was discovered. It is not expected that Connection Type would be retrospectively changed over timeframes of weeks or months.

**Q58. If the connection type determines the market segment, can the mapping be published?**

The mapping of Connection Type --> Meter Type --> Market Segment will be contained in a new ISD Entity table.

**Q59. Does a meter removal have to be received and accepted before the details of the new meter installation can be sent and accepted?**

No, there is also an Event to action an Exchange.

**Q60. At present, Change of Meter and Change of Energisation Status is covered in one process, reducing the need for two sets of dataflows. Does this change under the MHHS Design, and if so, why?**

Yes, MHHS considers Meter Removal and Change of Energisation to be two separate events, so to separate messages would need to be sent for each event.

**Q61. Why does the LDSO send the de-energisation reading to the Metering Service, rather than the Data Service?**

When consulting on the development of the process it was felt that, as in the MHHS world the Metering Service 'owns' the Energisation Status, the LDSOs should pass Change of Energisation details to the Metering Service in the first instance.

**Q62. What is the process for linked MPANs which do not have a matching change on those linked MPANs?**

Where appropriate, certain types of change e.g., Connection Type / Market Segment will be replicated across all linked MPANs.

**Q63. Will Connection Type for whole current differentiate between single-phase and multi-phase?**

No.

**Q64. What is the process for smart remote changes which were previous sent through D0367 and associated D0010s?**

In the MHHS world the Metering Service will not be concerned with the register level configuration of the meter.

**Q65. How do Smart Meters receive MTDs via legacy dataflows?**

Core MTDs will be sent via PUB-002 pre-gain and PUB-036. However, this will not include register configurations. In the MHHS world, the old supplier will close out on their configuration and new supplier will commence supply by implementing theirs.

**Q66. What is the process where a meter exchange has happened prior to half-hourly migration, but suppliers have not been updated by the current MOP processes?**

The Design Team have only recently start to consider Transition in detail and develop the processes that will be needed to support migration. Clearly, this is a scenario that would need to be catered for.

**Q67. Will previous MOPs be able to make change to meters installed during their effective period, or will it be limited to the current MOP?**

There will be a short window where the previous Metering Service can submit late/delayed metering changes, but as a rule it will only be the appointed Metering Service that can amend the metering history – albeit there is an expectation that Metering Services and supplier may need to work together to establish and confirm amendments required.

**Q68. Will a MAP04 or equivalent process be able to rectify errors?**

We understand MAP04 processes are due to be replaced in advance of MHHS go-live. The MHHS Design Team have suggested several new SDEP query types which might be created to help support the management of queries and data corrections between MHHS participants – implementation of these will be discussed and agreed as part of the consequential change package of work.

**Q69. Will updating ES on ECOES continue to be the responsibility of the supplier?**

Energisation Status will be managed and maintained by the Metering Service. Suppliers will need to liaise with their appointed Metering Service if they feel that the Energisation Status is set incorrectly or requires validation.

**Q70. Has the Programme considered situations where supply can simultaneously be de-energised and disconnected?**

Metering activities, Changes in Energisation Status and Disconnection are considered as separate events. However, where a Disconnection is processed the Registration Service will assume that the site has also been de-energised and will set the status as such if it has not been already.

**Q71. What is the process for DNO/customer disconnections?**

Please refer to [Process MAP BP007](#)

**Q72. If the disconnection has been made in error, what is the process to reverse the disconnection?**

This will depend upon what stage the Disconnection process has reached at the point at which the error is identified. If it is prior to the MPAN being De-Registered in CSS, then contacting the LDSO for advice would be the best course of action. If CSS De-Registration has already occurred, then the process cannot be halted or reversed and a new replacement MPAN would need to be created.

**Q73. Is there a process in place where disconnections occur with the meter still on site?**

It would be normal practice, for many reasons, to always recover the asset. However, if there are instances where the meter is left in place, the Metering Service would likely still go through the process of logically removing the meter via [\(IF-005\)](#) so it would appear, to the LDSO, that metering had been removed. Some LDSOs will require metering to have been removed logically or in practice before considering processing a Disconnection request.

**Q74. Does the Registration Service issue notification to suppliers of de-appointment?**

Yes, Suppliers will receive notification/confirmation of Service Provider De-Appointment via PUB-037.

**Q75. Where are traditional meters and register readings represented on Process Map?**

[Please refer to BP009](#) – Steps 75 and 80 cover the movement of data for Traditional and Advanced Meters.

#### 4.4 MPANs

**Q76. What is a Linked MPAN, and why is it not shown in the EES? Can customers separate import and export MPANs?**

An industry Change Request (CP1558) has been approved which introduces two new fields to link export and import MPANs. The linkage will only be made where it is appropriate to do so. Not all Export MPANs will be linked to an Import, suppliers will be able to manage this linkage in conjunction with the LDSO.

**Q77. How is the consent granularity changed for a non-domestic MPAN?**

Consent Granularity is maintained by the Supplier using Interface IF-025/26.

**Q78. What is the implication of export MPANs being considered as related MPANs?**

Export MPANs will not be considered as related quite the same way as 'related MPANs'. They will be linked together using the new data items introduced by CP1558. This linkage will then be used to ensure, where appropriate, the Import and Export MPANs are both serviced by the same Service

Providers. The supplier will determine the circumstances when it is appropriate to link together an Export and import MPAN per the BSCP guidelines.

**Q79. Is the Registration Service using qualification data to ensure that the Service Provider is appropriate for the MPAN?**

Yes. The Registration Service will perform a check to ensure that appropriate Service Providers are appointed to an MPAN. Suppliers can use the 'SEG' Appointment Scenario to put in place new Service Providers in expectation of a change in Connection Type or Change of Market Segment – however, the Registration Service will again check their validity prior to making those appointments active.

**Q80. Will the registration service expose services which provide the latest view of an MPAN?**

Yes. The Programme is still in discussions with RECCO about this, but it is likely that this will be realised via existing and possibly new APIs into EES/Ecoes. The existing refresh mechanism for EES/Ecoes will be upgraded so that it receives near real-time updates from the registration system, meaning that both the EES/Ecoes GUI and APIs are a true and accurate reflection of the data held in the Registration Service.

**Q81. What is the process for decommissioning an MPAN?**

Please refer to the Design Artefact [BP-007](#).

**Q82. Is the appointment process only initiated for the lead MPAN?**

Yes, in the case of Linked Import/Export MPANs and Related MPANs – Service Provider appointment would only take place on the Import or Primary MPAN. The linked Export and/or secondary MPANs would then have their Service Providers 'Auto-Aligned'. Once the appointment on the principal/lead MPAN has successfully completed.

#### 4.5 Questions on Unmetered Sites

**Q83. Does the Programme expect the Unmetered Supplies Operator (UMSO) to use different system interfaces for re-qualification?**

The Data Transfer Network (DTN) flows were introduced in June 2022. The Programme does not expect further changes to be required.

**Q84. Will the Unmetered Supplies Data Service (UMSDS) system enhancements made to accommodate MHHS be accredited?**

This has been changed, and these DTN flows will be replaced by the DIP. Within the DIP, APIs will manage what participants can access and how they access it.

**Q85. Will the UMSO need to requalify?**

Yes, they will. However, the Programme expects that this will be a light touch as technically they will be doing less.

**Q86. How do the future costs of Unmetered Supply (UMS) compare to the existing NHH and HH Meter Administration (MA) costs?**

We cannot answer this as it is down to commercial discussions between the UMSDS and the Suppliers.

**Q87. Are the ECS reports contained in the Interface Catalogue?**

No, they are in separate artefact – ERI011B - ECS reports – external.

**Q88. What are the key SLA changes for UMS?**

These will be defined in the Code Drafting phase. However, the Operational Choreography artefact – OC001 - identifies the timescales for provision of data to Elexon Central Systems.

**Q89. How will the UMSDS be funded for all customers?**

Customers can contract their own UMSD. Otherwise, the Supplier will need to contract this service on behalf of the customer.

**Q90. Will the CC/SR valid combinations between included in the Industry Standing Data?**

Yes, see the [ISD Entity catalogue](#).

**Q91. How many MA will switch the UMSDS?**

We, expect both existing MAs to become UMSDS.

**Q92. Is there a risk that there will be very few UMSDS performing critical MHHS activities in the future?**

Yes, there is a risk but this is a very specialised service so it is uncertain any new entrants will materialise.

**Q93. Can customer continue to make their own UMSDS/MA appointments?**

Yes, UMS customers can continue to contract directly with the UMSDS.

## 5. Questions on Migration

### 5.1 Migration

**Q1. How will participants know when MPANs have been migrated?**

The Migration Design will be confirmed after the delivery of the Physical Baseline Design (Milestone 5) and will provide more information on the migration of MPANs. We would encourage Programme participants to attend the [Level 4 Migration Working Group](#) to feed into the Programme's migration strategy and processes. To attend, please email [PMO@MHHSProgramme.co.uk](mailto:PMO@MHHSProgramme.co.uk).

## Q2. How long will the legacy systems run post go-live?

The use of legacy systems is an issue for the Balancing and Settlement Code (BSC) panel to decide. Some reports and monitors, for example the settlement timetables, will determine when some services are removed.

## 6. Questions on Programme Engagement

### 6.1 Design Playbacks logistics and organisation

#### Q1. Will all the Playback sessions be recorded and published?

Yes. All the sessions will be recorded and published, along with the materials for each session. The recordings and the materials for the session can be found on the [Events page of the MHHS Website](#), with links circulated in the Clock each week. Additionally, all recordings can be found on our [YouTube page](#). This applies to all public sessions that the Programme will run. This also extends to our monthly Webinar series.

#### Q2. Will there be a session on BPD004 Data Collection?

This is something that Programme is more than happy to cover. We would encourage Programme participants to utilise the Design Surgeries and Deep Dives for this purpose. For both Design Surgeries and Deep Dives, Slido will open two days in advance allowing participants to submit their questions early. For more information, please see the [detailed schedule](#).

#### Q3. How do Programme participants access the Design Playback sessions and other Programme Webinars and events?

There are two main methods by which Programme participants can access the Design Playback sessions. Firstly, please use the [detailed schedule](#) where Programme participants can book onto any of the sessions. To register for a session using the schedule simply:

- Click on the respective link in the **Session Title** column on the left-hand side
- Follow the Eventbrite link
- Click **Register** and fill in your details
- You'll receive an email confirmation of the session - **please import this into your calendar**.

The Programme will also send reminder emails including the Teams link and will add registered attendees to the Calendar invite in advance.

Secondly, all Design Playbacks can be found on the Design [calendar of events](#) on the Collaboration Base, linking to their associated Eventbrite pages. Follow steps 2 – 4 above to register. Additionally, all of the upcoming Programme events including Working Groups, Design Playbacks, and Webinars can be found on the [Programme Events page](#) of the Collaboration Base.

The Clock is the key means by which Programme participants can find out about upcoming events, including details of each monthly Webinar. For the Programme-wide monthly Webinar series, invites will be issued by the Programme Party Coordinator (PPC) Team when Programme participants email to confirm their interest in attending.

To attend any of our Working Groups, please email the PMO at [PMO@MHHSProgramme.co.uk](mailto:PMO@MHHSProgramme.co.uk).

**Q4. Can the Programme hold additional Design discussions in September after the holiday season?**

The Programme understands that some Programme participants may be unable to attend some sessions due to holidays or lack of time and resources. Where this is the case, the Programme has sought to mitigate the impact by recording the sessions and providing access to the associated materials. The recordings and the materials for the session can be found on the [Events page of the MHHS Website](#). Additionally, all recordings can be found on our [YouTube page](#).

**Q5. Are there any contingency sessions planned in case the sessions are not able to cover the required level of detail in the time allotted?**

The purpose of the Design Playback sessions is to ensure the Programme participants are informed enough to provide review and comment on the Design Artefacts. The Programme believes that 90 minutes to two hours over the course of fifteen sessions will be enough to cover all the materials while balancing the Programme's own internal resource commitments. For the Design Surgeries and Deep Dives, our question-and-answer platform, Slido, will be accessible two days in advance of each session. This will allow Programme participants to submit their questions in advance for discussion on the day.

**Q6. Will the Design Playback Q&A be made available?**

The questions we receive through Slido during the Design Playback sessions are a great source of insight for the Programme. The Programme regularly updates this MHHS Design Q&A document to provide answers to all these questions throughout the Design Playbacks period.

**Q7. What is the format of the Design Playback sessions?**

There are four types of Design Playback session. Each of these serves a specific purpose, with the overall aim of enhancing Programme participants' understanding of the Design to provide informed review and comment.

Design Overviews are high-level sessions taking place throughout the playback period. They will contain the presentation of plans, progress, findings, and themes by our Programme Design team members. Each session is geared towards supporting Programme participants in their engagement with the Design.

End-to-End Walkthrough sessions will provide lower-level detail on the Design ahead of the comment windows opening. Design SMEs will explain the topics, referencing the relevant Design Artefacts to familiarise Programme participants with the business processes, methodology statements, etc.

The Design Surgeries are drop-in sessions, where Design Team SMEs will be available to answer questions from Programme participants on a set topic. Programme participants can log questions in advance of the session using our question-and-answer platform, Slido.

Deep Dives will have Design SMEs taking 60-90 minutes to provide a more granular level of detail on the specific topic of the Deep Dive. Programme participants can log questions in advance of the question using our question-and-answer platform, Slido.

For more information on the format of the each of the Design Playback sessions, please see the slides from [the Design Playback Introduction and Plan session](#).

**Q8. Will there be a session on the high-level principles of the Data Integration Platform (DIP)?**

Yes, there will be two Design Playback sessions which will cover the DIP in detail. The first of the End-to-end Walkthroughs on Monday 8 August from 13.00 – 14.30 will provide an introduction to the DIP. The Technical Deep Dive, on Wednesday 17 August from 13.00 – 14.30, will cover the DIP in greater detail.

If you require additional information on the DIP, please get in touch with the PPC Team at [PPC@MHHSProgramme.co.uk](mailto:PPC@MHHSProgramme.co.uk) and they will be happy to deal with your request.

For more information on what each of the Design Playback sessions will cover, please see the [detailed schedule](#) for more information on the purpose and topics to be covered in each session.

**Q9. How will the Programme support participants as they begin their internal detailed development?**

The Design team will continue to work with participants to resolve queries and issues. The Design Assurance team will also support participants in their understanding of the Design, and will undertake assurance of participants' internal plans, as they prepare for Systems Integration Testing or Qualification.

## 6.2 Engaging with the Programme

**Q10. How do I find out who my Programme Party Coordinator (PPC) representative is?**

The PPC Team has representatives across each of the Constituency Groups. Your PPC Team representative is there to ensure a two-way flow of information from Programme participants to the Programme. To find your PPC representative, please email the PPC Team at [PPC@MHHSProgramme.co.uk](mailto:PPC@MHHSProgramme.co.uk)

**Q11. Will participants be given access to the Azure DevOps site?**

This is currently being reviewed by the Programme. If it is decided that Programme participants will not have access to the Azure DevOps site, access to the information will still be provided on the Collaboration Base.

**Q12. How do participants access the Collaboration Base?**

To request access to the [Collaboration Base](#), please email [PPC@MHHSProgramme.co.uk](mailto:PPC@MHHSProgramme.co.uk). You can sign into the Collaboration Base via the MHHS website.

**Q13. Who is the DAG constituency rep for software providers?**

Software providers do not currently have a constituency representative on DAG. If you are interested in getting involved as the Software Providers Constituency Representation, please contact [PMO@MHHSProgramme.co.uk](mailto:PMO@MHHSProgramme.co.uk). There are constituency representatives for large, medium, small, I&C suppliers who may use software providers, please see the [DAG Terms of Reference](#) for more information.

## 6.3 The Design Review Process

### **Q14. What is the Programme's approach to version control for the Design Artefacts?**

Version control is of great importance to the Programme, and we have taken steps to ensure older versions of the Design Artefacts are clearly marked. The latest version of the Design Artefacts are published in the [End-to-End Design Artefacts](#) area of the Collaboration Base and on the MHHS website. These pages have been redesigned to make it easier to find Artefacts relating to each theme. Previous versions have been archived to avoid confusion. The latest versions of documents on the Collaboration Base are flagged with a status of "Under Review". For Design Artefacts that have been Conditionally Approved, we have published versions showing tracked changes in the [Change Control Artefacts](#) area of the Collaboration Base. For Business Process Diagrams (BPDs), a Change Control Log is also available, providing a summary of the changes. Please note, not all documents have been published at the time of writing. These should be published by 12 August 2022.

### **Q15. What is the Programme's approach to issues that are found in Conditionally Approved or Approved Artefacts?**

Where participants or the Programme have identified significant issues in Conditionally Approved or Approved documents, we have a robust process in place to make any required changes. Details of this process can be found in the [Design Review Guide](#). All Design Artefacts that were conditionally approved in previous Tranches were subject to an agreed list of Design issues and dependencies. Details of the resolution of these issues can be found in the [DAG Summary Report](#).

### **Q16. How do Programme participants prioritise which Artefacts to review?**

The Programme has developed a [Design Artefact Matrix](#) which will help participants to prioritise which Artefacts are most important for their organisation to review. The Design Artefact Matrix provides guidance to show Constituencies which Artefacts are most likely to impact them.

### **Q17. Can Programme participants view all previous comments and responses associated with a particular Design Artefact?**

Yes. Programme participants can view all the previous comments and responses associated with each Design Artefacts. For Design Artefacts which were part of the previous Tranches, the comments and responses can be found in the [Historic Comments Log](#) on the Collaboration Base. The comment log provides details on the comment itself, the owner or raiser of the comment, their organisation, the data submitted, status, and any updates on that comment from the Programme.

### **Q18. For how long is the comment window open?**

The comment window officially opens on the 30 August and closes on the 16 September. However, the Programme will accept comments throughout the whole of August. This gives Programme participants ample time to review the Artefacts and provide comments. In addition, our new [signposting content](#) and [Design Artefact Matrix](#) provide guidance for Programme participants to identify which Artefacts are most likely to impact their organisations.

While the Programme will be accepting comments throughout August, it will respond only when the comment window is closed on 16 September. More detail around the comment resolution process will be available in the coming weeks.

### **Q19. How do Programme participants raise a Change Request related to Design?**

Before raising a Change Request, Programme participants should raise their concerns using the Comment Log, selecting the relevant Design Artefact from the drop-down menu provided. The comment window officially opens on the 30 August and closes on the 16 September, after which the Programme will respond to comments. More detail around the comment resolution process will be available in the coming weeks.

If a participant wishes to raise a Change Request after the delivery of the Physical Baseline Design, they should do so using the established governance procedures. For more information on this, [please see the Change Control page](#) on the MHHS Website.

### **Q20. Will the Programme produce PDF documents for the Design Artefacts without tracked changes?**

Yes, the Programme will produce both clean versions and versions with tracked changes of the Design Artefacts on the Collaboration Base.

## **7. Questions on Registration**

### **7.1 General Registration**

#### **Q1. Does the DS receive MTDs following IF35 or IF36?**

When the incumbent Metering Service is appointed, details are sent to both the Registration Service (RS) and Data Service (DS). The Meter Technical Detail (MTD) report is part of the handshake between the two.

#### **Q2. When a Change of Supplier coincides with a Change of Service Provider, with DI800 be set to COS in IF33, 34, 35 and 36?**

Yes, it will be. If a Change of Supplier (CoS) was coincident with a Change of Connection Type, then the SEG scenario code could also be used to allow for additional time to get both changes completed.

#### **Q3. When a Service Provider is notified of another change of Service Provider, will DI1800 be set to USP or CSP?**

The Service Provider is notified of the change through either the initial appointment request (IF33) or a de-appointment. The scenario is set by the supplier, depending on the appointment scenario. CSP is used where there is a formal CoSP. USP would be used whether the SP is not changing but updating some characteristic of the appointment.

#### **Q4. On receipt of IF8, will registration issue an IF33 with USP appointment scenario?**

No, it would not be issued. IF8 is a notification of Change of Energisation Status (CoES), there is not IF33 involved.

**Q5. For a change to an existing appointment, will all fields on the IF33 be presented or just the mandated and changed fields?**

The Programme will need to review the documentation to check. However, we believe that all fields will be presented.

**Q6. Will there be any impacts on the CSS JSON message content because of MHHS?**

There will be no changes to the CSS JSON message content because of MHHS.

**Q7. Why does the MS/DS appointments go to the RS first?**

This was set as part of the very earliest working groups which were in place prior to the full mobilisation of the Programme. If you wish to change this, please submit a Change Request as part of the Change Control Process.

**Q8. What is the difference between DIP ID, DIP EZ Name and MPID?**

The DIP ID is the participant identifier used within the DIP. The DIP EZ is the shorthand organisation name which is linked to the DIP ID. The MPID is the BSC ID. The Industry Standing Data (ISD) table will be used to translate these.

**Q9. What is the relationship between DS and MDR?**

The Programme has not specified the nature of the relationship between the DS and the MDR. It is up to each entity as to how they are configured to provide the best service for them.

**Q10. Why is D0386 being retained for Related MPAN maintenance?**

There may be a good reason in the future to move D0386 to the DIP, and this is something the Design Team is considering.

**Q11. For a linked Smart MPAN, it is noted that DS will be different from primary. How will DIP know which DS to appoint as the IF31 is only sent for primary?**

It will not be the DIP which sends this message, but rather the Registration Service. This will be defined as part of Code Drafting.

**Q12. How are MDR appointment issues handled if there is no communication between SDS and supplier if there is any error on MDR appointment?**

This is something which the Programme has not prescribed how it should operate. It is up to the SDS and MDRs to decide the appropriate handshaking mechanisms and reporting of errors.

**Q13. Why are flows between MDR and SDS out of scope of the Programme?**

This was a design decision which was taken early in the Programme. There are several different models of how configuration can be achieved, and the MDR and SDS operate as separate entities.

**Q14. How will the system handle delays to Change of Supplier SecuredActive?**

The Registration Service will need to be aware of this, and the Programme has put requirements in place around highlighting dependencies between SecuredActive and BAU processing from the queue and within the RS.

**Q15. Are suppliers expected to send updated IF33 to Service Providers where there is a change in Connection Type?**

This will depend on the scenario. However, it will be more likely in the case where there is a need to change SP completely rather than just update them. If the change in Connection Type leads to a change in segment, then the supplier will need to send an IF33.

**Q16. Why does the Operational Choreography not cover processes such as New Connection?**

Each LDSO will have their own mechanism for managing the New Connection process, and as a result the Programme cannot specify or prescribe requirements on this process within the Operational Choreography document.

**Q17. What are the changes to the 'As-is' D0300 process?**

There are effectively no changes as this is owned by RECCo.

**Q18. How would the removal of the MDR role impact the Target Operating Model, the Design and the replan?**

As things currently stand, no final decision has been made on this. The Programme will analyse any decision to understand the impact and will communicate this to participants at an appropriate time.

**Q19. Why are export MPANs treated as related MPANs?**

The code drafting will make this area much clearer. The Programme does not believe that all export MPANs must be linked to import MPANs, and they should only be linked where appropriate. The exact criteria of when they are linked will be provided within the code changes.

**Q20. Will the DIP interact with the DTN during migration?**

While both will be operational into transition and migration, there will be no interaction between DIP and DTN.

**Q21. When will the Programme provide sample JSON messages for the Interfaces?**

We are waiting on completion of the JSON schema. Once complete, we will release the examples.

**Q22. Will the MPID used for the current model be used under MHHS?**

Yes. Both the MS and DS will need to have a presence in both the DIP and DTN worlds. Within the DIP, participants will be identified by DIP ID. Within the DTN, MPID will be the identifier. They will be mapped together through ISD.

**Q23. What reason code should be used in IF31 for when it is because of a New Connection?**

This would be Change of Supplier (CoS).

**Q24. How is ECOES changing to support the new registration and metering data items?**

ECOES is managed by RECCo, and any changes are covered as part of Consequential Change.

**Q25. Why does a supplier need to qualify and have MDP DIP ID when appointing an SDS, when they are using their DCC supplier access to collect the HH data?**

When a party is qualified, the Programme needs assurance that it will be able to operate with the SDS, including when it is operating as an MDR.

**Q26. When a customer agrees a new contract with an MS or DS, is the agent appointed automatically?**

The supplier will need to appoint the agent, it is not done automatically.

**Q27. Can a supplier obtain historic HH settlement data for an MPAN?**

Yes, in the Advanced Meter segment. There will be a four-month period of historic data available.

**Q28. What will replace the D0367 and D0010s when a supplier remotely updates the tariff on a Smart device?**

When MHHS is implemented, the MS will no longer be concerned with how metering is configured at a register level. The SDS will be concerned with consumption and will download the consumption log as a primary source of consumption data.

**Q29. How will a participant know if an MPAN is in the MHHS TOM?**

The Programme is currently working to deliver the migration design and approach. Once this is settled, we will communicate it to participants.

**Q30. How can a participant identify if a MPAN is in legacy or the DIP?**

The Programme is currently working to deliver the migration design and approach. Once this is settled, we will communicate it to participants.

## **7.2 Change of Supplier (CoS)**

**Q31. How will a supplier know that their Change of Supplier (CoS) gain is for an MPAN which has not migrated?**

The MHHS Design Team are currently defining the processes for Transition/Migration to MHHS arrangements – these will be discussed with the Migration Working Group and other stakeholders shortly. It is likely that a Supplier will need to ‘declare’ that it is MHHS capable, at which point it would acquire customers using the MHHS mechanism/Service Providers (DS/MS). Suppliers who have not made this declaration would continue to operate using ‘old world’ processes/agents (DC/MOP).

The next Migration Working Group meeting is on 8<sup>th</sup> September. Please email the PMO at [PMO@MHHSProgramme.co.uk](mailto:PMO@MHHSProgramme.co.uk) if you would like to attend.

**Q32. Does the D0086 process remain in the Change of Supplier (CoS) traditional meter process?**

The D0086 is no longer used as part of the process. However, the Design Artefact [BP003C](#) details all the exchanges of readings between parties following a CoS for Traditional, Smart & Advanced sites.

**Q33. If the gaining supplier's service appointment request is rejected, will the losing supplier still receive an auto de-appointment PUB message?**

Yes, the 'Auto De-Appointment' of Service Providers (appointed by the outgoing Supplier) will be triggered by receipt of the "SecuredActive" notification of the new Supplier by the Registration Service. The outgoing Supplier will receive confirmation of the Auto-De-appointment via PUB-037. Appointment of Service providers is solely the responsibility of the incoming Supplier – the outgoing Supplier/Service Provider responsibilities will end at the End Supply Date.

**Q34. Is there a difference between the appointment of Agents as part of the CoS compared to new connections?**

No, the process is the same.

**Q35. Will Service Providers be able to reject appointments?**

Yes, absolutely. Please reference IF-033/IF34 for details of the reasons a Service Provider might reject an appointment. Any rejection will be communicated back to the Supplier via PUB-035.

**Q36. Will the de-appointment of a Service Provider be managed by the CSS?**

No, the appointment process is entirely managed by the Registration Service. However, the Registration Service will use "SecuredActive" notifications received from CSS to determine if 'Prospective Appointments' should be made active or lapsed.

**Q37. Will retrospective appoints only be allowed to fill gaps where no service provider has been appointed?**

Yes, retrospective appointments will only be to fill gaps where no Service Provider was appointed. Whilst it will be possible to change Service Provider 'on-the-day' (subject to the incoming Service Providers Acceptance), it will not be possible to retrospectively 'cut-into' an elapsed period of an existing of appointment.

**Q38. Will there be a guaranteed SLA in place for automated de-appointments?**

Yes, the Auto De-Appointment functionality will be a requirement of the Registration Service, any failure of it to operate as expected would be a 'defect'. Auto De-Appointment would be expected to trigger, following receipt of "SecuredActive" for a new Supplier, Appointment of a new Service Provider, CSS confirmation of MPAN 'De-Registration', or as part of the Auto Service Provider alignment functionality. The sending of De-Appointment notifications would usually take place as part of a group of processes that would run following gate closure.

**Q39. How are future-date appointments held in a pending state cancelled or replaced?**

There is more information on how this mechanism works in both the Registration Service Requirements and in the Additional Information section of the [Interface document](#). However, a Supplier will submit a Prospective Service Provider Appointment(s) perhaps at the point the Objection window close (but in advance of the planned SSD) it will then remain the queue until the Appointment start date is reached. If it cannot be successfully matched with a Secured active request for the same day, it will be lapsed.

**Q40. Can the Service Request Variant (SRV) appointment process start once the CSS message confirming the MPAN has been created?**

MHHS Service Provider appointments would need to align with the date of first/initial Registration of the MPAN in CSS not its creation date.

**Q41. Is there a new status referred to as “lapsed” in addition to the current “pending”, “secured”, or “cancelled”?**

Pending, Secured, Cancelled are statuses commonly associated with a CSS Switch Request. “Lapsed” is a term that the Design Team are using to describe Prospective Service Provider Appointments, that do not become active or come into effect, because they cannot be matched to a coincident successful Change of Supplier event (SecuredActive notification for the same date sent from CSS to the Registration Service).

## 8. Questions on Settlement

### 8.1 General Settlement

**Q1. How will settlements performance be calculated in MHHS, and which party will be responsible?**

When data is submitted, it will be flagged as estimated or calculated. Estimation reason code, and method of estimation will help estimate this value. The BSC will be able to establish performance requirements around this, dependent on the settlement risks. These risks will be managed through the performance assurance structure.

**Q1. If an Energisation Change and Change of Agent are both in flight, which is queued and which is prioritised?**

The two are not directly connected. If the energisation status changes the incumbent agent will be notified by the Registration Service. If there is a change of Data Service, the Data Service will be notified by the Registration Service of the energisation status as part of its appointment.

**Q2. What visibility will the industry get of any exceptions that may occur?**

There are exception reports defined on ingestion of data to Elexon Central Systems and exceptions that are identified at Settlement Run time (See IF 013 and IF 014).

**Q3. How will GSP Group Correction Factors be calculated during the transition?**

If it is backward looking, the existing GCF calculation will be used. Once the Programme goes live, there will be a new calculation of GCF for both import and export.

**Q4. Why will Market Domain Data be frozen for five years, if there is a possibility that it may be needed for a longer period?**

The Programme believes that five years should be sufficient. If it needs to be retained beyond this, then there is no reason to prevent that from happening.

**Q5. How will the Volume Allocation Service (VAS) operate during the transition period, and will it need to take new-world data from SDS and old-world data from Data Aggregators?**

During Transition both HHDA data and MDS data, provided by all types of Data Service for the Settlement calculations.

**Q6. In BP016 on the Consumption Amendment, can Annualised Consumption be amended?**

No, the Annual Consumption is calculated using the data in central systems. The consumption amendment process is to override the HH Settlement data.

**Q7. Are the objects and domains in the ISD aligned with MDD?**

Where entities are identical, they are unchanged. Some MDD entities have been amended in ISD and there are some new ones defined.

**Q8. Regarding Volume Allocation, will there be any interaction between MHHS and the calculations for Virtual Lead Parties (VLPs) and the Applicable Balancing Services Volume Data (ABSVD)?**

Yes, there will. Under MHHS the data used in these calculations will come in from ADSs acting on behalf of the VLP and data from behind the meter.

**Q9. Currently the DA issues D0095. Will there be an equivalent for MDS?**

No, there will not. The MDS will report missing data, which will allow data services to estimate the data ahead of a following reconciliation run.

**Q10. What is the role of the DC in data validation in MHHS?**

The DCs are being replaced by three different Data Services, each of which have their own data validation requirements. More information can be found in the Method Statements.

**Q11. Will defaulting rules change?**

Defaulting will use the new Load Shapes in the absence of data.

**Q12. Is there scope for the new GSP GCFs to go-live prior to transition?**

No this would require changes to the legacy SVAA systems.

**Q13. What will the lowest level of the supplier settlement invoice be post-MHHS implementation?**

This will still be trading party level.

**Q14. Where MPANs are not estimated and data is defaulted by MDS, will exception reports be sent to Data Services?**

Yes. See IF-013.

**Q15. Has there been an analysis of the settlement risk impact of moving to four months for RF?**

This has been widely debated. Ofgem is keen for this to be as short as possible so that parties can close their books earlier. There is a disputes process to allow for correction after the four-month period.

**Q16. Does the data for IF-016 come from the DIP or from MDS?**

The replay will be held by the DIP.

## 8.2 Estimated Annual Consumption (EAC)

**Q17. How will accurate direct debits be set without the use of EACs for traditional and non-communicating smart meters?**

The EAC will be replaced by Annual Consumption data calculated by MDS, see design artefact [MHHS-BRS012-Annual Consumption Requirements v3 0](#). It is proposed that this will be produced by Elexon and made available on EES via the DIP.

**Q18. How will Price Comparison Websites (PCWs) work without using EAC data?**

While the EAC is being removed, the Programme will be putting in place a new MHHS calculated value, called Annual Consumption. For the calculation, please see the [Annual Consumption Method Statement](#). PCWs will be able to use this Annual Consumption data.

**Q19. Would the Programme consider making the EAC data available via the Electricity Enquiry System (EES)?**

We are currently developing the MHHS requirements for EES and have proposed this as a requirement, which can be seen in the [Annual Consumption Requirements Design Artefact](#).

### 8.3 Profiling and Profile Class

**Q20. Will Consumption Component Classes (CCCs) remain?**

Yes. However, they will be replaced with new ones. Both old and new MHHS CCCs will be used in the transition period, see Market Domain Data (MDD) for existing CCCs and [ISD Design Artefact](#) for new MHHS CCCs.

**Q21. What is the Programme's approach to Standard Settlement Classes (SSCs) and Time Pattern Regimes (TPRs)?**

SSCs and TPRs will not be in Industry Standing Data for MHHS but will remain in transition (and 5 years after) in Market Domain Data (MDD).

**Q22. Will the same correction factor be applied to all import and export factors equally or will there be any differences to account for portfolio type of Suppliers?**

For every settlement period, two correction factors will be calculated: one specifically for import sites and one specifically for export sites. Under MHHS there will be different correction factors by Consumption Component Class.

### 8.4 Industry Standing Data (ISD)

**Q23. How will Industry Standing Data (ISD) changes show the effective date when a change goes live?**

The notification of a Change to ISD is in [IF-047](#) and it contains the publish date and version number of ISD.

**Q24. When will the Industry Standing Data (ISD) be ready?**

The date is yet to be confirmed for a fully populated version of ISD. It is expected to be ready before industry testing.

**Q25. Will the Programme issue an ISD revision message when the ISD is first released?**

Yes, the notification of a Change to ISD is in [IF-047](#) and it contains the publish date and version number of ISD.

**Q26. What will the ISD scheduled timetable be?**

The current assumption is that ISD will follow the same publication schedule as currently with MDD. However, the timing of this will be determined in the Code drafting work when the replacement to MDD BSCP508 is developed.

**Q27. Will there be a list of changes identified in each ISD alert?**

This information will be produced by Elexon when each ISD alert is issued. IF-047 will identify if a new alert has been issued, but participants will need to refer to the Elexon Website and the Change Log or Briefing Note if they want specific details of the change.

**Q28. Will the ISD entities document outline where data items are being replaced?**

No, it sets out the amended existing entities and all the new one.

**Q29. Are objects and domains in the ISD aligned with Market Domain Data?**

Where retained they will be aligned between ISD and MDD noting the amendments to existing entities.

## 8.5 Load Shaping Service (LSS)

**Q30. How will the Load Shaping Service operate?**

The Load Shaping Service will use actual meter data from smart, advanced meters to calculate the required load shapes. For more information, please see the LSS [Design Artefacts](#).

**Q31. Does the Advance Data Service (ADS) pass data to the Load Shaping Service?**

Yes. There are load shape categories for advanced, smart meters and unmetered supplies.

**Q32. Will the Load Shaping Service also apply to Advanced meter missing volumes?**

Yes. A lot of the existing estimation techniques will remain in the advanced segment, but they also receive the load shapes for other estimation calculations.

**Q33. What is the Programme's approach to managing the Load Shaping Service when there are new connections with no historic data?**

The Load Shaping Service will only use actual meter data to create the Load Shapes.

**Q34. Does the Programme foresee an increase in Grid Supply Point (GSP) Group Correction Factors (GCF) required, if the LSS half-hourly volumes are generic compared to the Metering System Identifier (MSID) specific Estimate Annual Consumption (EAC) where there are many legacy meters remaining?**

The Programme's assumption is that the correctible volume should reduce. Load shapes will be calculated using data for the actual settlement date, so they will reflect actual temperature and

illumination. The sample sizes will be much larger, and the Load Shapes will be on a regional, rather than national, basis. This will lead to more accuracy, reducing GSP group correction.

**Q35. How is the Volume Allocation Service (VAS) able to calculate Group Correction Factors (GCFs) during transition when it is running in parallel with the Settlement Administration Agent (SAA)?**

Forward looking dates during the transition will use the new Grid Supply Point (GSP) GCF calculation using the existing data and the new MHHS data. Backward looking will use the existing data and the old GSP GCF calculation.

**Q36. How will usage patterns and shapes be determined for MPANs for which there is only non-half-hourly (NHH) data available?**

The Load Shapes are calculated from actual HH meter data and will be applied to those meters that only have daily reads (or longer periods or not at all).

**Q37. How will related MPANs work within the LSS?**

The LSS does not need to know about related MPANs in its calculation of Load Shapes.

**Q38. How will E7/E10 work within the LSS? Will there be a means of demarcating between peak and off-peak?**

The LSS will calculate Load Shapes which then can be applied by the SDS for E7/E10 meters. More information can be found in the [SDS Validation and Estimation Methodology Statement](#).

**Q39. What is the frequency of the Load Shaping Service?**

The LLS will run every working day for each UTC Date.

**Q40. Will all Programme participants automatically receive all load shaping data prior to transition?**

Yes, it is planned that LSS data will be made available to market participants prior to go-live of MHHS. The exact mechanism and timing are to be confirmed.

**Q41. Will annual consumption values be provided for all Load Shape combinations?**

Annual Consumption data will be calculated for every MPAN. More information can be found in the [Annual Consumption Requirements](#).