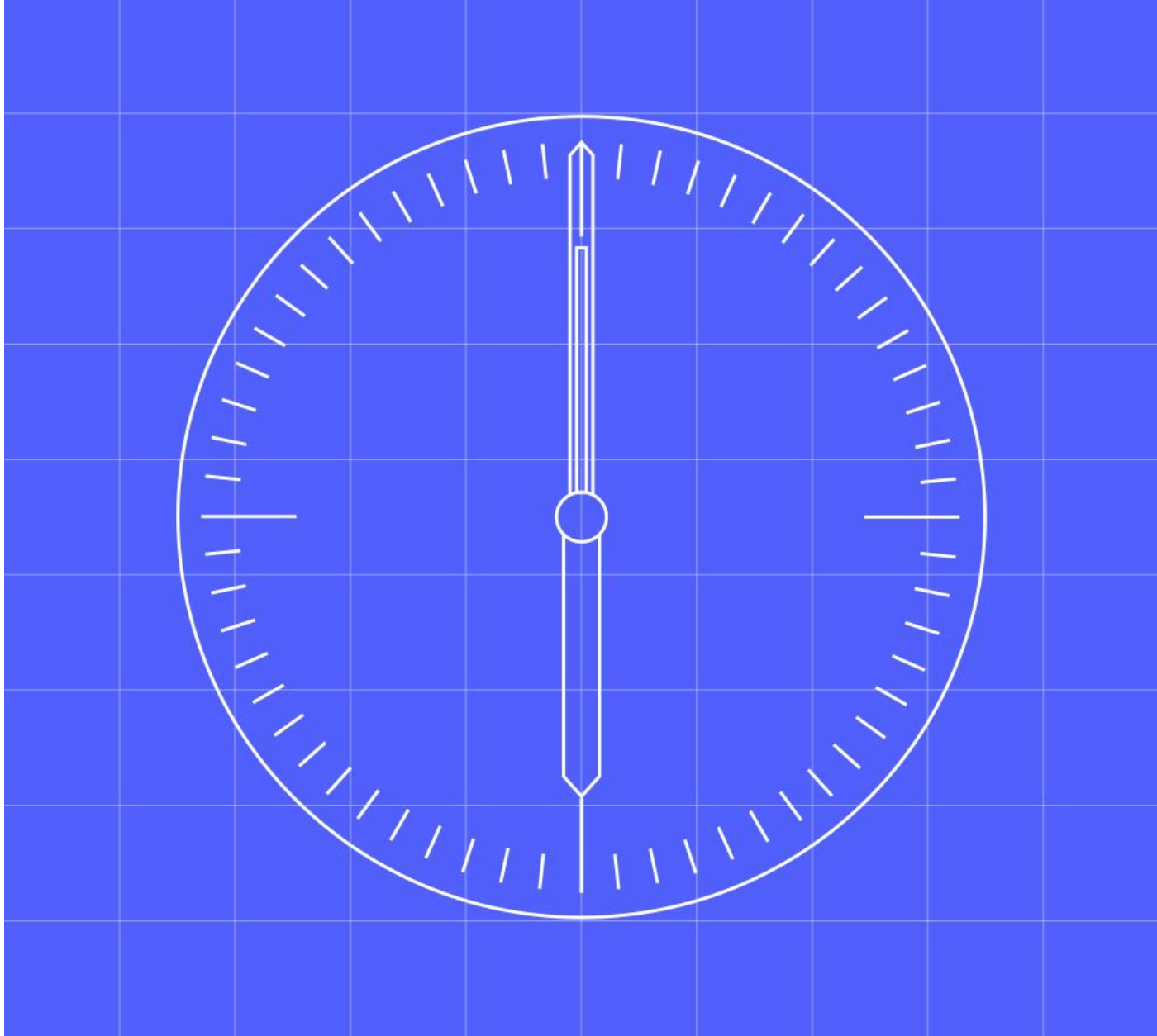


# MHHS-DEL2876 Self Qualification Assessment Document



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## 2. House Keeping

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### 2.1 Change Record

Date	Author	Version	Change Detail
08/07/2024	Elexon Performance Assurance	0.1	Draft version for consultation. This document has not been through the BSC PAB governance process yet. The information provided may change, subject to review.
08/08/2024	Elexon Performance Assurance	0.2	This document has been updated to reflect consultation comments for QWG review ahead of submission to QAG, BSC PAB for approval.
30/10/2024	Elexon Performance Assurance	V1.0	<u>PAB approved version</u>
03/12/2024	Elexon	V1.1	<u>Updates made to make reflect changes in the BSC Assessment Criteria. This document has had the DIP Section updated. It has also had housekeeping changes. This document also has been updated to reflect consultation comments for QWG review ahead of submission to QAG, BSC PAB for approval</u>
09/12/2024	Elexon	V1.2	<u>Updates made following QWG paper day, ahead of submission to QAG and BSC PAB for approval</u>
17/12/2024	Elexon and REC Performance Assurance	V1.3	<u>Minor updates made removing some OPC and MHHS requirements for data service roles, ahead of publishing</u>

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### 2.2 Linked Documents

Name	Link
Qualification Approach and Plan	<a href="https://www.mhhsprogramme.co.uk/testing/qualification/qualification-approach-and-plan">https://www.mhhsprogramme.co.uk/testing/qualification/qualification-approach-and-plan</a>
MHHS Qualification Glossary	<a href="#">MHHS Qualification Glossary</a>

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## 3. Document Instructions

The Self Qualification Assessment Document (SQAD) is the mechanism through which New Entrants who are not already qualified through the BSC, will provide the evidence required by BSC for MHHS Qualification. The BSC expect these new entrants to complete the SQAD at an organisation level, covering all Market Roles they intend to operate within the new MHHS arrangements.

For further details on the Qualification process please refer to the [Qualification Approach and Plan \(QA&P\)](#) which sets out the purpose of MHHS Qualification during the MHHS Programme and the high-level plan and requirements for Programme Participants to undertake in relation to the Balancing and Settlement Code (BSC).

To support the efficient review of evidence and to avoid unnecessary delay between the completion of Qualification Testing (QT) / MHHS Programme Systems Integration Testing (SIT) and MHHS Qualification being approved, evidence should be provided the SQAD Submission. Where test evidence has been uploaded into Microsoft Azure DevOps (ADO), this should be referenced within the SQAD, rather than uploading evidence in multiple places.

All sections must be completed and verified for the submission of the SQAD.

The relevant MHHS requirements are provided for reference only, and Participants are not expected to delineate their responses for each MHHS requirement. Participants should respond to the specific questions in the form, using the guidance provided.

The finalised SQAD must be signed by a Company Director to confirm that the information and evidence provided is complete and accurate.

Acronyms and defined terms used across the MHHS Programme are hosted in a MHHS Programme artefact - [MHHS Qualification Glossary](#), and further terms relating to qualification are defined in 'Appendix A – Glossary' of the Qualification Approach and Plan.

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## 4. Organisation Section

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### 4.1 Company Sign Off

**Name of Programme Participant Organisation:**

Except for the matters detailed below (delete if not applicable), having made appropriate enquiries of other directors and officials of the organisation, I confirm that:

- 1) The information and evidence provided in this Self Qualification Assessment Document is true and accurate and not misleading because of any omission or ambiguity or for any other reason.
- 2) The processes and controls noted within this Self Qualification Assessment Document are an accurate reflection for our arrangements for MHHS live operations, and I acknowledge that any further changes will be required to be disclosed to BSC and/or REC as detailed in 7.3.7 of the Qualification Approach and Plan.
- 3) The arrangements as documented are adequate and appropriate to deliver and operate our in-scope service(s) in-line with the BSC obligations brought about by Marketwide Half-Hourly Settlement.

Please detail any exception(s) here:

**Approved by**

\_\_\_\_\_

**Print Name**

\_\_\_\_\_

**Signature (Electronic)**

\_\_\_\_\_

**Position**

\_\_\_\_\_

**Date**

Note: Signed by Authorising Director i.e. a registered Director of the company (verifiable with Companies House, or in the case of a non-UK company a person having an equivalent position)

## 4.2 General Information

Questions	Guidance	Participant Response	
4.2.1 What is the name of the organisation as registered with Companies House or Non-UK Registered Parties?			
4.2.2 What is your Company Registration Number as per Companies House or Non-UK Registered?			
4.2.3 What is the MPID(s) with the Role Code(s) that you wish to apply for MHHS Qualification?	<i>Please note while we will endeavour to grant you your preferred MPID, this will be subject to availability.</i>	Supplier	
		ADS	
		SDS	
		UMSDS	
		LDSO/SMRA/UMSO	
4.2.4 Who is the Key Contact?	Please provide their Name, Role and Email		
4.2.5 Who are the authorised signatories for the service(s) for Qualification matters?	Qualification-related documentation should be authorised by a registered Director of the company (verifiable with Companies House or in the case of a non-UK company a person having an equivalent position), for and on behalf of their company in respect of Qualification issues.		

## 4.3 Project Management

Questions	Guidance	Participant Response	
4.3.1 How have you ensured that the development or modification of the service, including systems and processes, has been planned, monitored and controlled properly using a structured project management framework in accordance with Good Industry Practice?	<p>Your response should include the following:</p> <ul style="list-style-type: none"> <li>• Senior management support or a project board, along with a clear definition of the scope, deliverables, phases, and milestones.</li> <li>• Identification and planning for risks/issues impacting timelines, costs, or success, along with formal processes for project initiation, financial approval, progress monitoring, and closure.</li> <li>• Evaluation of success upon project/phase completion and retention of all related documentation in a central location or document register.</li> </ul>		

#### 4.4 Change Management and Risk Assessment Process

Questions	Guidance	Participant Response
<p>4.4.1 How do you ensure that any risks arising as a result of changes to be made to your organisation, systems and processes are identified and assessed?</p>	<p>The response should including the following:</p> <ul style="list-style-type: none"> <li>• Ongoing procedures should exist to ensure that all risks identified are assessed to ensure that any issues which present a risk to Settlement are identified and addressed.</li> <li>• Procedures to ensure that where a risk has been identified, a link has been provided to the mitigating action to be taken to address the risk.</li> </ul>	
<p>4.4.2 What change control procedures do you have and how do you ensure these are operating effectively?</p>	<p>The response should address the following areas:</p> <ul style="list-style-type: none"> <li>• A designated individual or team oversees the change control process, ensuring it runs effectively, addresses potential issues, and only authorised changes are made.</li> <li>• Documented procedures cover changes to system software, applications, hardware, and manual processes, ensuring all relevant updates are implemented on time.</li> <li>• Staff understand their roles, and regular reviews (internal or external) are conducted to ensure compliance with change control procedures.</li> <li>• Data and system backups are performed before and after each change, ensuring recovery if needed. Procedures are also in place to manage any changes affecting BSC Systems or related services, with BSCCo to be notified in accordance with BSCP40 – Change Management.</li> </ul>	

## 4.5 Testing Declaration and Evidence Submission

Questions	Guidance Points	Participant Response
<p>4.5.1. Please confirm if there have been any changes to the information provided in the Pre-Qualification Submission form, or Placing Reliance Proposal, if you submitted one.</p>	<p>[Yes/No/Not Applicable]</p> <p>If yes, please provide an updated Pre-Qualification Submission or Placing Reliance form, highlighting the parts that have changed.</p> <p>If you were not required to submit a pre-qualification submission, please select N/A.</p>	
<p>4.5.2. Please confirm that for each MHHS requirement, you have successfully completed the relevant testing requirements in Pre-Integration Testing (PIT) to satisfy the BSC Assessment Criteria, have provided PIT documentation including an approved MHHS-DEL1052 PIT Test Completion Report, and where applicable, agreed a work-off plan with the BSC for any outstanding defects.</p>	<p>[Yes/No]</p> <p>If no, please detail which requirements you have not successfully completed testing for, and any mitigation or alternative evidence you have agreed with the relevant Code Bodies.</p> <p>If you have an agreed work-off plan, please provide an update here of the latest status of agreed actions.</p> <p>Your PIT Approach and Plan should have included your defect identification and resolution policy, release management policy, and regression testing policy; if it does not, please provide these separately.</p>	
<p>4.5.3. Please confirm that all relevant process documentation, including Local Work Instructions (LWIs) for operatives have been created for all business processes required to meet the BSC MHHS Assessment Criteria.</p>	<p>[Yes/No]</p> <p>If no, please detail expected timeframes to complete; these should be completed by the finalised submission of the SQAD.</p> <p>These updates should cover all the relevant 'Business Processes' to your role(s) from Section 5 of the SQAD.</p>	
<p>4.5.4. Please confirm that for each testable MHHS requirement, you (and/or your third-party software provider) have successfully completed the relevant testing requirements in SIT or QT, and where applicable, agreed a work-off plan with the BSC for any outstanding defects.</p>	<p>[Yes/No]</p> <p>If no, please detail which requirements you have not successfully completed testing for, and any mitigation or alternative evidence you have agreed with the relevant Code Bodies.</p> <p>If you have an agreed work-off plan, please provide an update here of the latest status of agreed actions.</p>	



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## 4.6 Operational Readiness

Questions	Guidance Points	Participant Response
4.6.1 Please provide details on your user readiness plan to ensure that operatives will be able to perform the processes during live operations.	This should include plans for additional training, guidance documentation, user testing, dress rehearsals, and post go-live monitoring. You may wish to provide a written summary of these planned activities, and/or upload relevant support documentation outlining this.	
4.6.2 What adjustments, if any, are required in your organisation's resource needs to meet the design brought by MHHS, and how does your organisation intend to fulfil these requirements?	This response should include a resourcing plan, specifically highlighting areas in which you would like to onboard expertise. Please reference changes required for both the migration period and post-migration activities.  You may wish to provide a written summary of these planned activities, and/or upload relevant support documentation outlining this.	

## 4.7 Information Security and Data Protection

Questions	Guidance Points	Participants Response
<p>4.7.1 How do you ensure that you have appropriate security and control arrangements in place that are reviewed on a regular basis?</p>	<p>The response should address the following areas:</p> <ul style="list-style-type: none"> <li>• Accountable individuals must be assigned for the security of business data and/or systems, with clear responsibilities for reviewing and updating the Security Policy.</li> <li>• A Security Policy, aligned with industry standards such as ISO27001, should be in place, with ongoing communication and education for all staff.</li> <li>• Formal procedures and schedules must be established for reviewing the Security Policy, ensuring compliance, addressing any identified issues, and reporting findings to Senior Management. Any updates to the policy should be communicated to all staff, ensuring those responsible are competent and independent from daily operations.</li> </ul>	
<p>4.7.2 How do you ensure the confidentiality of your data?</p>	<p>The response should address the following areas:</p> <ul style="list-style-type: none"> <li>• Communication of confidentiality requirements to all staff, either through a formal policy or within employment contracts.</li> <li>• Established procedures for updating policies/contracts and communicating changes to all staff as they occur.</li> <li>• System controls in place to ensure data confidentiality is properly applied where relevant.</li> </ul>	
<p>4.7.3 What plans does your organisation have in place to address Disaster Recovery of all key data, systems and processes and how will you ensure business continuity considering the people, knowledge resources and office space required to operate the service?</p>	<p>The response should address the following areas:</p> <ul style="list-style-type: none"> <li>• Existence of a Disaster Recovery Plan. This should consider the following key areas: <ul style="list-style-type: none"> <li>○ A thorough assessment of the risks to the service, including the actions needed to mitigate these risks and the assumptions made in the plan, such as the availability of key personnel to execute the plan.</li> </ul> </li> </ul>	

	<ul style="list-style-type: none"> <li>○ IT infrastructure, including hardware and software (with a focus on identifying sources for hardware replacement and ensuring access to the latest live version of relevant software).</li> <li>○ Relevant procedures and supporting documentation, including the procedures for invoking the plan and the clear allocation of responsibilities to appropriate staff for executing the plan.</li> <li>○ Supporting services such as telecommunications.</li> </ul> <ul style="list-style-type: none"> <li>● Clear assignment of roles and responsibilities for maintaining the Disaster Recovery plan, including Senior Management commitment such as Director review and sign-off.</li> <li>● Availability of an alternative location to operate the full service and plans for transferring IT and business staff there.</li> <li>● Arrangements to recruit additional staff with sufficient knowledge if current staff are unavailable, along with comprehensive IT and business procedures, system documentation, and training materials for new staff.</li> <li>● Back-up of local working procedures, system documentation, training materials, and key management reports used to monitor the service.</li> </ul>	
<p>4.7.4 How have you tested your Disaster Recovery plans prior to go-live (or for a re-Qualification within the 12 month period prior to your re-Qualification application)?</p>	<p>Disaster Recovery and business continuity plans should have been tested, with reasonable results within the 12 month period prior to your application.</p>	
<p>4.7.5 How will you ensure that your Disaster Recovery plans continue to be tested on an ongoing basis?</p>	<p>The plans should be reviewed, update and tested on an ongoing basis (this should include the establishment of frequency and trigger criteria for updating the plan(s), and demonstration of commitment to test).</p>	
<p>4.7.6 How has your business taken steps to ensure appropriate physical security and control procedures are in place to prevent unauthorised / inappropriate access to services and the supporting infrastructure?</p>	<p>The response should address the following areas:</p> <ul style="list-style-type: none"> <li>● Service premises and key server hardware should be physically secure, with appropriate environmental controls and full supervision over visitors and employees. Access should be restricted to essential personnel, and their physical access to server hardware should be regularly reviewed.</li> <li>● Visitors requiring access to the data centre or server room (e.g. contractors) should be fully supervised, and a record of their access should be maintained.</li> </ul>	

	<ul style="list-style-type: none"> <li>• 'Desktop' workstations should be located in physically secure areas, and the security of any remote working performed outside of business premises should be reviewed.</li> </ul>	
<p>4.7.7 How has your business taken steps to ensure appropriate application security and control procedures have been developed with respect to your service to guard against unauthorised logical access to data and programs?</p>	<p>The response should address the following areas: Application level security controls in place over the service including:</p> <ul style="list-style-type: none"> <li>• Formal procedures are in place for authorising application-level user access.</li> <li>• Individual user IDs and passwords are provided for application-level access, with concurrent logons and generic IDs prohibited. Passwords must meet security policy standards.</li> <li>• Access to service systems is assigned based on training and designated roles.</li> <li>• Account lock-out procedures are implemented after multiple failed login attempts.</li> <li>• User access to applications is periodically reviewed and adjusted to reflect changes in employee roles and responsibilities.</li> </ul>	
<p>4.7.8 How has your business taken steps to ensure appropriate operating system and privileged security and control procedures have been developed with respect to your service to guard against unauthorised logical access to data and programs?</p>	<p>The response should address the following areas: Operating system level security and privileged access controls in place including:</p> <ul style="list-style-type: none"> <li>• Access to operating systems (e.g. UNIX, NT) is restricted to IS support staff only.</li> <li>• Individual user IDs and passwords are assigned to all users authorised to access the operating system. For example, UNIX-authorized users must log into their own accounts before using the "SU" command to switch to "root". For NT, authorised administrators should be assigned individual profiles within the "Administrator" group.</li> <li>• Audit trails should be enabled to trace any activities back to individual user ID accounts.</li> <li>• Segregation of duties should be maintained between IS Support staff (e.g. IS support staff and security administrators) and business users</li> </ul>	

	responsible for day-to-day data input and processing within the service system.	
4.7.9 How has your business taken steps to ensure appropriate database administration security and control procedures have been developed with respect to your service to guard against unauthorised logical access to data and programs?	<p>The response should address the following areas: Database Administration security and access controls in place including:</p> <ul style="list-style-type: none"> <li>• Formal procedures for managing database administrator access to the live production environment.</li> <li>• Wherever possible, assign individual user IDs and passwords to database administrators in accordance with best practices and policy.</li> <li>• Changes to the production environment should only be implemented following formal authorisation from the relevant data owners.</li> <li>• Audit trail controls must be in place to monitor DBA access to production data, with regular reviews of the audit logs produced.</li> </ul>	
4.7.10 How has your business taken steps to ensure appropriate security and control procedures have been developed over external connections with respect to your service to guard against unauthorised logical access to data and programs?	<p>The response should address the following areas: Security and controls in place over external connections (including email, internet, web servers, connections to third parties, removable media, etc.) including:</p> <ul style="list-style-type: none"> <li>• Use of firewalls, including regular reviews of firewall configurations and monitoring of firewall reports.</li> <li>• Virus detection and cleansing controls, applied to all external network connections, servers, and desktops, with regular updates to anti-virus software and email monitoring for attachments.</li> <li>• Additional security controls for dial-up access, including further risk assessment procedures for third-party connections to the organisation's information systems, to ensure that appropriate controls are in place.</li> </ul>	
4.7.11 How do you ensure that your IT 'housekeeping' procedures, such as initiating data processing, system monitoring and back-ups are managed in an effective manner to ensure appropriate system availability?	<p>The response should address the following areas:</p> <ul style="list-style-type: none"> <li>• Housekeeping activities carried out by the core operations/data centre team. Please specify the extent to which these procedures are automated.</li> <li>• Formal documentation and training are in place to ensure IT staff understand their responsibilities and are competent in fulfilling them.</li> </ul>	

	<ul style="list-style-type: none"> <li>• Scheduling and monitoring are undertaken to ensure all daily, weekly, and monthly housekeeping tasks are completed as required.</li> <li>• Procedures are established to ensure the timely identification, logging, and resolution of errors or problems.</li> <li>• Formal senior management review procedures are in place to ensure all IT operations and housekeeping activities are conducted in a timely manner and as required.</li> </ul>	
<p>4.7.12 How have you ensured that appropriate data back-up, archive and restoration arrangements have been established and operate effectively?</p>	<p>This question is not referring to the specific Disaster Recovery plans you have in place (4.1.3) but to daily operational back-up processes that should be performed.</p> <p>The response should address the following areas</p> <ul style="list-style-type: none"> <li>• The backup strategy is implemented through user or computer operations procedures and task schedules.</li> <li>• Procedures and processes are in place to regularly test backup data to ensure it can be used to restore lost business information.</li> <li>• Regular, independent reviews of backup practices are conducted, with formal reporting back to management.</li> <li>• Procedures and processes are established to ensure the security of any physical storage of backup data, including USB drives and hard copies of documents.</li> <li>• Procedures and processes are implemented to ensure that personal data is not retained longer than necessary, in compliance with the General Data Protection Regulation (GDPR).</li> </ul>	

## 4.8 Initial Data Population and/or Data Migration

Question	Guidance	Response
<p>4.8.1 How have you ensured that a data population / migration strategy has been developed to an appropriate level of detail to demonstrate that you are able to operate the service following data population / migration?</p>	<p>Evidence would be expected to include a data population / migration strategy defining:</p> <ul style="list-style-type: none"> <li>• A clear strategy for the initial population or migration of data across records/systems.</li> <li>• Defined responsibilities and timelines for each component of the plan.</li> <li>• Identification of any risks associated with the plan and the mitigating controls to be implemented.</li> <li>• Success or acceptance criteria for each stage of the data population or migration, along with an explanation of how these will be measured.</li> <li>• Contingency procedures to ensure uninterrupted service in the event of a migration failure.</li> </ul>	
<p>4.8.2 How can you ensure that the service is populated with data that has a level of accuracy such that it meets the data quality requirements and performance standards as set out in the BSC, BSCPs, PSL100 and, where relevant, data cleansing is performed?</p>	<p>The response should address the following areas of the data population / migration process:</p> <ul style="list-style-type: none"> <li>• Measures implemented to ensure the timely transfer of all MSID-related data to the system supporting the service before the go-live date.</li> <li>• Controls established to ensure the completeness, accuracy, and integrity of data migration, including procedures to ensure that incoming and outgoing data flows are appropriately handled during the migration process.</li> <li>• Procedures in place to cleanse poor quality data before migrating it to the new system.</li> <li>• Processes to identify and resolve any data migration failures or exceptions.</li> <li>• Demonstration of a suitable audit trail.</li> </ul>	

## 4.9 Data Integration Platform (DIP)

Prior to moving to the production environment, the DIP Manager will review the following section in adherence with DSD002 requirements.

It is accepted that Programme Participants can adopt a myriad of different system designs in meeting the MHHS requirements, however, it is recognised that the designs will generally fit into one of two patterns. The first pattern is where Participants have a single system responsible for running and orchestrating the business process as well as interfacing directly to the DIP - a single primary architecture. The second pattern is where participants will utilise the services of a DCP (DIP Connection Provider) to provide the interface to the DIP typically to their own back-end primary system - a hybrid architecture. The scope of Participant's QAD submissions must include the entire architecture; be it either a simple single primary architecture, or a more complex hybrid architecture. If a hybrid design is adopted, then the material must cover all components including DCP details as it is the complete system that defines the end-to-end system security, reliability and performance.

Participants also need to be aware that DCP systems do not qualify for MHHS access in their own right. Hence, individual participant submissions cannot reference other submissions or SIT evidence where their DCP may have been involved, i.e. each QAD submission must stand-alone solely on the evidence provided.

Questions	Guidance	Participants Response
4.9.1. Provide evidence of compliance with ISO 27000 series? ( <i>note: or equivalent provision in accordance with the DIP Rules</i> ) <u>(Include DCP if applicable)</u>	Most large organisations will have company specific documents that are required for ISO27000 compliance and hence providing evidence should not be an issue  Where companies are not ISO2700 compliant then submissions should contain company documents covering the following areas: Penetration Testing & vulnerability management. Cyber incident response plan that would typically follow NCSC Guidance.	
4.9.2. Provide evidence of process for retaining all audit logs of basic user activities (e.g., logon, logoff, failed attempts) and security events for all information systems and services that interact with the DIP <u>(Include DCP if applicable)</u>	Your Response should evidence retaining all audit logs of basic user activities (e.g. logon, logoff, failed attempts); and Security events for all information systems and services that interact with the DIP Provide an overview of your process in place to retain any security events for all	



	information systems that interact with the DIP	
4.9.3. Provide an overview of your process in place to retain any security events for all information systems that interact with the DIP. <i>(Include a DCP if applicable)</i>		
4.9.4. Provide evidence of logical network schematic of the information systems and services in scope that interact with the DIP, and include: <ul style="list-style-type: none"> <li>a. services and functionality;</li> <li>b. gateway/boundaries functionality</li> </ul> <i>(Include DCP if applicable)</i>	<p>Provide Documentation of design – e.g. logical design, physical design specifications, System Schematics – diagrams</p> <p>Including:</p> <ul style="list-style-type: none"> <li>Security- firewalls, networks, etc</li> <li>Connectivity to DCP</li> <li>Instance separation - prod vs non-prod , DCP to MP back-end system</li> <li>Resilience – e.g. failover</li> <li>Backup</li> <li>Audit</li> <li>Service Availability - 98%, outside planned outage (unless otherwise defined)</li> </ul> <p>Service Recovery</p> <p>In the event of an unplanned outage, each service shall be able to resume operation within 1 hour.</p> <p>Zero data loss - How RPO of 0 is achieved</p>	
4.9.5. Provide evidence that DIP Users systems are backed-up in accordance with best practice – demonstrable by adherence to ISO 27000 series processes and production of written process to back up systems, to include logical process diagrams; <i>(Include DCP if applicable)</i>		

<p><u>4.9.6. Provide an overview of your DIP Specific process in place for Key Management.</u> <u>(If applicable this will include how keys are transferred for DCPs)</u></p>	<p>Your response should include documentation on how keys are stored and managed. As well as Assignment of Certificate admins and renewing and ensuring integrity of certificate admin role. Any interaction with DCP and division of responsibility in managing certificate should also be evidenced.</p>	
<p>4.9.7. Provide an overview of processes, protocols, and liabilities between the DIP User and DCP where applicable.</p>	<p>The submissions will need to include DCP details (DCPs are not qualified) Processes, protocols and liabilities between the DIP User and their DCP, demonstrable by production of written documents (within limits of confidentiality); If the applicant is not willing to share the contract, then it may be evidenced by summary document of salient points. Ensure the DCP is ISO 27001 compliant.</p>	
<p>4.9.8. Provide evidence that your systems have the ability to store data received via the DIP for at least two years?</p>		
<p>4.9.9. Provide details of the following documents and processes that you have in place to ensure your compliance with data protection legislation:</p> <ul style="list-style-type: none"> <li>a. Relevant data protection policies,</li> <li>b. Relevant data protection processes, and</li> <li>c. Where applicable, data protection impact assessments.</li> </ul>	<p>Follow NCSC Guidance – incident management &amp; response Written processes as applicable</p>	
<p>4.9.10. Provide documentation to show an overview of your contingency plan in place for:</p> <ul style="list-style-type: none"> <li>a. Data breaches,</li> <li>b. Security events, and</li> </ul>	<p>Security events for all information systems and services that interact with the DIP</p>	

c. Other emergencies in relation to DIP data		
4.9.11. Provide evidence that you are aware of your responsibilities as a Data Controller and/or Processor in accordance with relevant Data Protection Legislation.		
4.9.12. Provide logical architectural schematics and/or descriptions (or equivalent documentation) evidence that in the event of a single component failing there will be no data loss. (Include DCP if applicable)	Your response should show both Participant and DCP systems (included with 4.5.4 above)	
4.5.13. Please self-declare whether you have updated your systems and business processes to ensure that you will <ul style="list-style-type: none"> <li>• ensure services that interface with the DIP have an availability of 98% outside planned outage periods</li> <li>• Ensure you do not plan outages within the Secured Active processing window</li> </ul> If you cannot self-declare you will meet these requirements, please confirm by when you expect to be able to make this self-declaration.	As 4.5.4 above	
4.5.14. Have you signed the Access Agreement with the DIP Manager if you are not a BSC Party?  If not - this must be completed prior to your final SQAD submission (see DSD002 Annex Four)	Please ensure you sign the access Agreement if you need too. This must be completed prior to your final SQAD submission	

## 4.10 Interface Management

Data Management Area	Questions	Guidance Points	MHHS requirements	Participant Responses
4.10.1 Data Integration Platform (DIP)	a) What controls and procedures do you have in place around Market Message management to ensure they are robust and appropriate to meet the BSC and REC obligations brought about by MHHS that are relevant to your role(s)? .	<p>Your response should capture the controls you have in-place, with regards to the DIP Interface, to ensure that you will continue to meet your wider BSC and REC requirements.</p> <p>For example, this may include the monitoring controls and escalation process you have in place for missing or erroneous DIP interfaces.</p> <p>You should also reference how you have implemented processes around recovery processes and data backups to ensure that in the case of any interruption to your access to the DIP, you will be able resume your key business processes when the interface is restored.</p> <p>Your response may include controls in systems directly to the DIP, or middleware such as the DIP adapter.</p> <p>Additionally, you may wish to provide a written summary of these processes and controls, and/or upload relevant support documentation outlining these.</p> <p><i>NB: This question is not intended to capture the DIP Non-Functional Requirements, which are covered in Section 4.5 Data Integration Platform.</i></p>	MHHS-BR-SU-122 MHHS-BR-SU-123.1 MHHS-BR-SU-123.2 MHHS-BR-SU-124 MHHS-BR-SU-126 MHHS-BR-SU-127 MHHS-BR-SU-128 MHHS-BR-SU-129 MHHS-BR-SU-140 MHHS-BR-LD-058 MHHS-BR-LD-059.1 MHHS-BR-LD-059.2 MHHS-BR-LD-062 MHHS-BR-LD-063 MHHS-BR-LD-064 MHHS-BR-MS-070 MHHS-BR-MS-072 MHHS-BR-MS-073 MHHS-BR-MS-074 MHHS-BR-MS-075 MHHS-BR-MS-083 MHHS-BR-MS-091 MHHS-BR-DS-138 MHHS-BR-DS-139.1 MHHS-BR-DS-139.2 MHHS-BR-DS-143.1 MHHS-BR-DS-144	

<p><b>4.10.2 Data Transfer Network (DTN)</b></p>	<p>a) How is your connection to the DTN maintained to send and receive flows?</p>	<p>For Question 4.6.2 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• How you interface with the DTN i.e. what systems do you use to send and receive DTN flows.</li> </ul> <p><i>NB: The purpose of this and the next question is to provide further context for the rest of the DTN questions and role-specific questions; it may be easier to answer these questions together.</i></p>	<p>MHHS-BR-SU-138 MHHS-BR-RS-143 MHHS-BR-MS-083 MHHS-BR-DS-149</p>	
	<p>b) What systems do you use to send DTN flows and what automation steps do you have in place?</p>	<p>For Question 4.6.2 B - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• Which systems are used to route and process inbound and outbound DTN flows</li> <li>• To what extent the routing and processing of DTN flows is automated, or manual</li> <li>• For elements of this process which are manual: <ul style="list-style-type: none"> <li>○ What training and documentation will be provided to operatives to ensure they understand how to operate these processes?</li> <li>○ Will they be managed onshore or off-shore?</li> <li>○ What monitoring controls will you have in place to identify where manual intervention is needed</li> </ul> </li> </ul>		

	<p>c) What are your validation steps for DTN flows received via the DTN?</p>	<p>For Question 4.6.2 C - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• Validation mechanisms in place to verify that the information received is correctly formatted and that you will be able to process it</li> <li>• Additional business process controls in place to identify where there are discrepancies between the data received and what you expected, then how the required next steps are identified e.g. updating internal records, or requesting clarification from the sending party</li> </ul>		
	<p>d) How are details updated and maintained onto your system?</p>	<p>For Question 4.6.2 D - Your response should include the following:</p> <ol style="list-style-type: none"> <li>a) Monitoring controls you have in place to ensure that where required, DTN updates have been reflected throughout your systems in a complete and accurate manner?</li> </ol> <ul style="list-style-type: none"> <li>• Where you identify that DTN updates have not been captured and reflected throughout your systems, how will you ensure your systems and records are then appropriately updated?</li> </ul>		
	<p>e) How have you adapted your systems and processes regarding DTN flows to reflect the new MOA and Data Services Market Roles?</p>	<p>For Question 4.6.2 E - Your response should include the following:</p>		

		<ul style="list-style-type: none"> <li>For DTN flows both in the scope of MHHS Testing and not in the scope of MHHS Testing, there have been new scenario variants added to reflect the new MOA and Data Services roles. How have you ensured that you have updated your systems and processes to capture these new roles and variants.</li> </ul>		
	f) How have you tested the DTN flows and to what extent?	<p>For Question 4.6.2 F - Your response should include the following:</p> <ul style="list-style-type: none"> <li>For DTN flows not in the scope of MHHS Testing, there have been new scenario variants added. Additionally, the changes you have made for MHHS may have had further consequential impacts on how data from, and for, other DTN flows is captured, processed, and stored. Have you performed any testing over these other DTN flows, else how will you ensure they will continue to function as expected.</li> </ul>		
4.10.3 <b>Industry Standing Data (ISD)</b>	What controls do you have in-place to ensure that ISD updates are captured within all relevant systems to support wider business processes?	What monitoring controls do you have in place to ensure that ISD updates have been reflected throughout your systems in a complete and accurate manner?	MHHS-BR-SU-123 MHHS-BR-LD-059 MHHS-BR-MS-071 MHHS-BR-DS-139	

		Where you identify that ISD updates have not been automatically captured, how will you ensure your systems and records are then appropriately updated?		
<b>4.10.4 Electricity Enquiry Services (EES)</b>	a) Will you require access to the Electricity Enquiry Service to receive up-to-date Electricity Market information, and if so, do you already have the access you need via the GUI and/or API? Else, will you make an application for the access you need?	<p>Electricity Market Participants can access EES via a variety of methods, including a GUI, API, and via Bespoke Reports.</p> <p>The changes to your systems and processes may require you to receive information from EES differently from how you currently receive it. Therefore, please confirm whether you already have the access that you will need to EES, else outline when you will apply for updated access.</p> <p>Additionally, if you have access to the EES API please confirm that you will update your interface in-line with the new technical specification e.g. will be able to process queries that return additional data items compared to currently.</p>	<p>MHHS-BR-SU-139  MHHS-BR-DS-156  MHHS-BR-MS-090  MHHS-BR-DS-156</p>	



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## 5. Role-Specific Section

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Please ensure you directly answer each question, including the specific areas noted in the guidance points.

## 5.1 Supplier

### 5.1.1 Business Processes

Data Management Area	Questions	Guidance Points	MHHS requirements	Participant Responses
<p>5.1.1.1 Initial Registrations, including New Connections</p> <p>In line with MHHSP-BP001, MHHSP-BP002, MHHSP-BP003</p>	<p>a) Aside from the functional elements tested in PIT/SIT/QT, what developments have been made to your E2E business processes? (e.g. inputs, workflows, integrations, and downstream systems and processes)</p>	<p>For Question 5.1.1.1 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>A disclosure of developments made to systems and processes which have not been tested as part of PIT/SIT/QT. This could be because, for example, you have made changes to upstream, downstream, and/or interfacing systems which have not been captured within the scope of the functional test scenarios and scripts but will form part of the wider business process requirements as defined in the BSC Codes.</li> <li>Additionally, this may be because you are placing reliance on testing completed by other MHHS Participants for common systems, but the integration with your own end-to-end solution has not yet been tested.</li> <li>Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information.</li> </ul>	<p>MHHS-BR-SU-001 MHHS-BR-SU-004 MHHS-BR-SU-019 MHHS-BR-SU-048 MHHS-BR-SU-048.1 MHHS-BR-SU-049</p>	
	<p>b) How have these E2E business processes been tested (e.g., testing within your own UIT environment)?</p>	<p>For Question 5.1.1.1 B - Your response should include the following:</p>		

		<ul style="list-style-type: none"> <li>How will you gain assurance that even with these developments, your wider end-to-end systems and processes will still enable you to operate in line with your BSC Code Requirements. For example, will you perform further testing in your own UIT environment, and if so, what will be the scope of this testing and who will be involved.</li> </ul>		
	c) What controls do you have in place to monitor for missing or erroneous DIP interfaces, particularly regarding the IF001 and IF002 that should coincide with the CSS2370.	<p>For Question 5.1.1.1 C - Your response should include the following.</p> <ul style="list-style-type: none"> <li>How you will obtain registration details for an Initial Registration, and maintain records accordingly</li> <li>Any controls in place to monitor and resolve missing/erroneous DIP interfaces. Please reference IF001, IF002 and any other flows you deem relevant in your response.</li> </ul>		
	d) How will you ensure that you capture all of the information required in the Secure Data Exchange Portal (SDEP) message requesting the DNO to establish a new metering point?	<p>For Question 5.1.1.1 D - Your response should include the following.</p> <ul style="list-style-type: none"> <li>Method(s) to request MPAN creation from the DNO when a new connection is required, and how you will ensure you include the following information in your request: Connection Type, Energy Direction, Metered/Unmetered Indicator, Market Segment.</li> </ul>		
<p>5.1.1.2 <b>Appointment with Change of Supplier</b></p> <p>In line with MHHSP-BP002, MHHSP-BP003</p>	a) Aside from the functional elements tested in PIT/SIT/QT, what developments have been made to your E2E business processes (e.g. inputs, workflows, integrations, and downstream systems and processes)	<p>For Question 5.1.1.2 a - Your response should include the following:</p> <ul style="list-style-type: none"> <li>A disclosure of developments made to systems and processes which have not been tested as part of PIT/SIT/QT. This could be because, for example, you have made changes to upstream, downstream, and/or interfacing systems which have not</li> </ul>	<p>MHHS-BR-SU-002 MHHS-BR-SU-005 MHHS-BR-SU-006 MHHS-BR-SU-007 MHHS-BR-SU-008 MHHS-BR-SU-009 MHHS-BR-SU-010 MHHS-BR-SU-011 MHHS-BR-SU-012</p>	

		<p>been captured within the scope of the functional test scenarios and scripts but will form part of the wider business process requirements as defined in the BSC Codes.</p> <ul style="list-style-type: none"> <li>• Additionally, this may be because you are placing reliance on testing completed by other MHHS Participants for common systems, but the integration with your own end-to-end solution has not yet been tested.</li> <li>• Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information.</li> </ul>	<p>MHHS-BR-SU-013  MHHS-BR-SU-014  MHHS-BR-SU-015  MHHS-BR-SU-016  MHHS-BR-SU-017  MHHS-BR-SU-019  MHHS-BR-SU-059  MHHS-BR-SU-106  MHHS-BR-SU-107  MHHS-BR-SU-135  MHHS-BR-SU-136  MHHS-BR-SU-158  MHHS-BR-SU-159  MHHS-BR-SU-160</p>	
	b) How have these E2E business processes been tested (e.g., testing within your own UIT environment)?	<p>For Question 5.1.1.2 B - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• How will you gain assurance that even with these developments, your wider end-to-end systems and processes will still enable you to operate in line with your BSC Code Requirements. For example, will you perform further testing in your own UIT environment, and if so, what will be the scope of this testing and who will be involved.</li> </ul>		
	c) What controls do you have in place to verify that a Qualified Data Service and/or Metering Service is appointed for the relevant Market Segment from the Registration Effective From Date (EFD)?	<p>For Question 5.1.1.2 C - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• Method(s) to identify and appoint a Qualified Data Service and/or Metering Service to the relevant Market Segment, and ongoing monitoring controls to ensure the correct appointment is in place.</li> </ul>		
	d) What controls will you put in place to manage Supplier Agent activities to ensure the end-to-	<p>For Question 5.1.1.2 D - Your response should include the following:</p>		

	<p>end process is carried out within MHHS defined timescales. This includes:</p> <ul style="list-style-type: none"> <li>a. Data Services activities e.g. sending Consumption data</li> <li>b. MOA activities e.g. sending MTDs</li> </ul>	<ul style="list-style-type: none"> <li>• Controls to ensure Supplier Agent Activities are carried out in line with MHHS defined timescales and messages are processed within 60 minutes of receipt, outlined in the operational choreography. Controls may include ongoing monitoring processes and follow-up communication where activities are delayed. Please refer to both: <ul style="list-style-type: none"> <li>○ Data Service activities</li> <li>○ MOA activities</li> </ul> </li> </ul>		
	e) How will you identify when you need to raise a dispute to switch meter reads given the amendments to the triggers for raising a dispute, the extension of the application to cover half hourly metering point?	<p>For Question 5.1.1.2 E - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• Methods to identify raising a dispute to switch meter reads.</li> </ul>		
	f) What controls do you have in place to ensure the end-to-end process is carried out within MHHS defined timescales as outlined in the Operational Choreography and baselined in the relevant codes?	<p>For Question 5.1.1.2 F - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• Controls to ensure a dispute is identified, raised and resolved as early as possible.</li> </ul>		
	g) How will you identify discrepancies between metering details received from SMRS with information from the Metering Service?	<p>For Question 5.1.1.2 G - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• Processes to identify any discrepancies between metering details received from the SMRS, and information from the Metering Service, and how these discrepancies will be flagged to the appropriate agent in a timely manner</li> </ul>		
5.1.1.3 <b>Appointment without Change of Supplier</b>	a) Aside from the functional elements tested in PIT/SIT/QT, what developments have been made to your E2E business processes (e.g. inputs,	<p>For Question 5.1.1.3 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• A disclosure of developments made to systems and processes which have not</li> </ul>	See Q2	

<p>In line with MHHSP-BP002, MHHSP-BP003</p>	<p>workflows, integrations, and downstream systems and processes)</p>	<p>been tested as part of PIT/SIT/QT. This could be because, for example, you have made changes to upstream, downstream, and/or interfacing systems which have not been captured within the scope of the functional test scenarios and scripts but will form part of the wider business process requirements as defined in the BSC Codes.</p> <ul style="list-style-type: none"> <li>• Additionally, this may be because you are placing reliance on testing completed by other MHHS Participants for common systems, but the integration with your own end-to-end solution has not yet been tested.</li> <li>• Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information.</li> </ul>		
	<p>b) How have these E2E business processes been tested (e.g., testing within your own UIT environment)?</p>	<p>For Question 5.1.1.3 B - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• How will you gain assurance that even with these developments, your wider end-to-end systems and processes will still enable you to operate in line with your BSC Code Requirements. For example, will you perform further testing in your own UIT environment, and if so, what will be the scope of this testing and who will be involved.</li> </ul>		
	<p>c) Please note where controls are different to those in Q5.1.1.2.</p>	<p>For Question 5.1.1.3 C - Your response should include any additional controls you have in place to manage appointments that were not outlined in Q5.1.1.2.</p>		

<p>5.1.1.4 <b>Change of Market Segment</b> In line with MHHSP-BP011</p>	<p>a) Aside from the functional elements tested in PIT/SIT/QT, what developments have been made to your E2E business processes (e.g. inputs, workflows, integrations, and downstream systems and processes)</p>	<p>For Question 5.1.1.4 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• A disclosure of developments made to systems and processes which have not been tested as part of PIT/SIT/QT. This could be because, for example, you have made changes to upstream, downstream, and/or interfacing systems which have not been captured within the scope of the functional test scenarios and scripts but will form part of the wider business process requirements as defined in the BSC Codes.</li> <li>• Additionally, this may be because you are placing reliance on testing completed by other MHHSP Participants for common systems, but the integration with your own end-to-end solution has not yet been tested.</li> <li>• Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information.</li> </ul>	<p>MHHS-BR-SU-021 MHHS-BR-SU-022 MHHS-BR-SU-097 MHHS-BR-SU-098 MHHS-BR-SU-099 MHHS-BR-SU-100 MHHS-BR-SU-101 MHHS-BR-SU-102 MHHS-BR-SU-103 MHHS-BR-SU-104 MHHS-BR-SU-105 MHHS-BR-SU-108 MHHS-BR-SU-109 MHHS-BR-SU-019</p>	
	<p>b) How have these E2E business processes been tested (e.g., testing within your own UIT environment)?</p>	<p>For Question 5.1.1.4 B - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• How will you gain assurance that even with these developments, your wider end-to-end systems and processes will still enable you to operate in line with your BSC Code Requirements. For example, will you perform further testing in your own UIT environment, and if so, what will be the scope of this testing and who will be involved.</li> </ul>		

	<p>c) How will you liaise with the customer, LDSO and Metering Service as appropriate to coordinate the change and agree a target work date?</p>	<p>For Question 5.1.1.4 B - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• Process in place to coordinate and conduct a change of Market Segment with the appropriate parties.</li> <li>• How you will communicate between the customer, LDSO and metering service to arrange a date for completion of work. Please also include details of how you will ensure the target date is met, and if there is any delay, how you will liaise with the Metering Service/LDSO to provide a prompt update.</li> </ul>		
	<p>d) What controls do you have in place to ensure that you identify when new service providers are required?</p>	<p>For Question 5.1.1.4 D - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• Any controls in place to identify when a new service provider is required following a change of Market Segment</li> </ul>		
<p><b>5.1.1.5 Identifying Faults</b></p>	<p>a) Aside from the functional elements tested in PIT/SIT/QT, what developments have been made to your E2E business processes (e.g. inputs, workflows, integrations, and downstream systems and processes)?</p>	<p>For Question 5.1.1.5 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• A disclosure of developments made to systems and processes which have not been tested as part of PIT/SIT/QT. This could be because, for example, you have made changes to upstream, downstream, and/or interfacing systems which have not been captured within the scope of the functional test scenarios and scripts but will form part of the wider business process requirements as defined in the BSC Codes.</li> <li>• Additionally, this may be because you are placing reliance on testing completed by other MHHS Participants for common</li> </ul>	<p>MHHS-BR-SU-132 MHHS-BR-SU-133 MHHS-BR-SU-134</p>	



		<p>systems, but the integration with your own end-to-end solution has not yet been tested.</p> <ul style="list-style-type: none"> <li>Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information.</li> </ul>		
	b) How have these E2E business processes been tested (e.g., testing within your own UIT environment)?	<p>For Question 5.1.1.5 B - Your response should include the following:</p> <ul style="list-style-type: none"> <li>How will you gain assurance that even with these developments, your wider end-to-end systems and processes will still enable you to operate in line with your BSC Code Requirements. For example, will you perform further testing in your own UIT environment, and if so, what will be the scope of this testing and who will be involved.</li> </ul>		
	c) How are you notified of any faults?	<p>For Question 5.1.1.5 B - Your response should include the following:</p> <ul style="list-style-type: none"> <li>Your chosen method(s) to be notified of any faults to metering equipment. This may be via the D0001 flow, or any other bilaterally agreed method.</li> </ul>		
	d) Where applicable how do you notify the UMSDS of any faults?	<p>For Question 5.1.1.5 C - Your response should include the following:</p> <ul style="list-style-type: none"> <li>Your chosen method(s) to notify the UMSDS of any faults.</li> </ul>		
<p>5.1.1.6 <b>Disconnections</b></p> <p>In line with MHHSP- BP007</p>	a) Aside from the functional elements tested in PIT/SIT/QT, what developments have been made to your E2E business processes (e.g. inputs, workflows, integrations, and	<p>For Question 5.1.1.6 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>A disclosure of developments made to systems and processes which have not been tested as part of PIT/SIT/QT. This could be because, for example, you have</li> </ul>		

	<p>downstream systems and processes)?</p>	<p>made changes to upstream, downstream, and/or interfacing systems which have not been captured within the scope of the functional test scenarios and scripts but will form part of the wider business process requirements as defined in the BSC Codes.</p> <ul style="list-style-type: none"> <li>• Additionally, this may be because you are placing reliance on testing completed by other MHHS Participants for common systems, but the integration with your own end-to-end solution has not yet been tested.</li> <li>• Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information.</li> </ul>		
	<p>b) How have these E2E business processes been tested (e.g., testing within your own UIT environment)?</p>	<p>For Question 5.1.1.6 B - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• How will you gain assurance that even with these developments, your wider end-to-end systems and processes will still enable you to operate in line with your BSC Code Requirements. For example, will you perform further testing in your own UIT environment, and if so, what will be the scope of this testing and who will be involved.</li> </ul>		
	<p>c) What systems and processes do you have in place to ensure that when confirmation of disconnection of a Meter Point Administration Number (MPAN) is received that records are maintained accordingly?</p>	<p>For Question 5.1.1.6 C - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• Processes in place to receive notifications of disconnected MPANs and how records of disconnections will be stored and maintained.</li> </ul>		

	<p>d) What controls do you have in place to ensure the disconnection is correct before continuing?</p>	<p>For Question 5.1.1.6 D - Your response should include the following:</p> <ul style="list-style-type: none"> <li>Validation controls to ensure the details around a disconnection request is correct before continuing with completion of work, including receipt from a correct party, reason for disconnection and any other relevant information.</li> </ul>		
	<p>e) How will you raise any issues if you do carry out the disconnection erroneously?</p>	<p>For Question 5.1.1.6 E - Your response should include the following:</p> <ul style="list-style-type: none"> <li>The chosen method(s) to raise any issues identified following completion of an erroneous disconnection to amend or reverse the disconnection.</li> </ul>		
<p><b>5.1.1.7 Change of Energisation Status</b></p>	<p>a) Aside from the functional elements tested in PIT/SIT/QT, what developments have been made to your E2E business processes (e.g. inputs, workflows, integrations, and downstream systems and processes)?</p>	<p>For Question 5.1.1.7 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>A disclosure of developments made to systems and processes which have not been tested as part of PIT/SIT/QT. This could be because, for example, you have made changes to upstream, downstream, and/or interfacing systems which have not been captured within the scope of the functional test scenarios and scripts but will form part of the wider business process requirements as defined in the BSC Codes.</li> <li>Additionally, this may be because you are placing reliance on testing completed by other MHHS Participants for common systems, but the integration with your own end-to-end solution has not yet been tested.</li> <li>Any instances where you have opted out of receiving DIP Publications, and how</li> </ul>	<p>MHHS-BR-SU-053 MHHS-BR-SU-060 MHHS-BR-SU-061 MHHS-BR-SU-062 MHHS-BR-SU-063 MHHS-BR-SU-064 MHHS-BR-SU-065</p>	

		you will ensure you will receive this information.		
	b) How have these E2E business processes been tested (e.g., testing within your own UIT environment)?	<p>For Question 5.1.1.7 B - Your response should include the following:</p> <ul style="list-style-type: none"> <li>How will you gain assurance that even with these developments, your wider end-to-end systems and processes will still enable you to operate in line with your BSC Code Requirements. For example, will you perform further testing in your own UIT environment, and if so, what will be the scope of this testing and who will be involved.</li> </ul>		
	c) What systems and processes do you have in place to ensure that Change of Energisation status notifications are received via different interfaces depending on segment, and that records updated accordingly?	<p>For Question 5.1.1.7 C - Your response should include the following:</p> <ul style="list-style-type: none"> <li>Processes in place to receive notifications of Change of Energisation notifications via IF flows or other mechanisms and how records of energisation status change will be stored and maintained.</li> </ul>		
<b>5.1.1.8 Unmetered Supply (UMS) Exemption</b>	If you wish to apply for the exemptions for UMS please fill in the below and provide evidence on how your controls work in practice: a) What controls do you have in place to ensure you will not register any UMS sites?	<p>For Question 5.1.1.8 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>When appointing sites, any controls in place to ensure you are Qualified to be appointed.</li> </ul>		
	b) What controls do you have in place to ensure you do not migrate a UMS site into MHHS if it is an existing registration?	<p>For Question 5.1.1.8 B - Your response should include the following:</p> <ul style="list-style-type: none"> <li>Controls to ensure UMS sites are only migrated into MHHS if the site is not an existing registration.</li> </ul>		

	<p>c) What controls do you have in place to identify where you have appointed a UMS site and how you will de-appoint this site?</p>	<p>For Question 5.1.1.8 C - Your response should include the following:</p> <ul style="list-style-type: none"> <li>Processes to identify where UMS sites have been appointed and what is your process to de-appoint these.</li> </ul>		
	<p>d) If you are currently a Supplier that has UMS Sites, please provide your clear and detailed plan on how you intend to de-register these sites and to provide evidence of it?</p>	<p>For Question 5.1.1.8 D - Your response should include:</p> <ul style="list-style-type: none"> <li>The plan should be clear and detailed explaining how you intend to de-register the sites that you are currently appointed to.</li> </ul> <p><i>Failure to provide this will impact your exemption.</i></p>		
	<p>e) Please also confirm that you understand that appointing UMS sites without being qualified could potentially result in re-qualification.</p>	<p>For Question 5.1.1.8 E - Your response should include the following:</p> <ul style="list-style-type: none"> <li>A statement of confirmation of the understanding that appointing UMS sites without the appropriate qualification could potentially result in a re-Qualification.</li> </ul>		
<p><b>5.1.1.9 Migration Requirements</b></p>	<p>a) What controls do you have in place to ensure you meet the specific registration and appointment requirements during a migration?</p>	<p>For Question 5.1.1.9 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>What controls will you have in place when you are the incoming Supplier to differentiate whether an MPAN is legacy, and if so how will you decide whether to migrate the MPAN as part of the Change of Supplier or Change of Agent process.</li> <li>Additionally, how will you ensure the effective from date for CoA appointments is at least 5 working days in the future from the transmission date of the IF-031.</li> <li>Furthermore, how will you ensure you do not have open IF-031's which are left unresponded to by Agents beyond appointment effective from dates.</li> </ul>		

		<ul style="list-style-type: none"> <li>Finally, what controls do you have in place to ensure you will not attempt to change the Market Segment of an MPAN as part of the Migration.</li> </ul>		
5.1.1.10 <b>Operational Requirements</b>	a) What controls do you have in place to ensure that you meet all of your requirements as outlined in the Operational Choreography Version 5.4?	<p>For Question 5.1.1.10 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>Both preventative controls and detective controls, which could include your monitoring activities and processes for manual intervention.</li> <li>How you will ensure you meet specific processing and response SLAs (these may be referenced in your answers above)</li> <li>How you will ensure you meet your operational requirements which may not have been tested during functional testing, such as OPC_320A to make data available to other parties (as applicable) by 06:00hrs the next Working Day after receiving a notification of disconnection.</li> </ul>	OPC_120 OPC_140 OPC_190 OPC_200 OPC_210 OPC_220 OPC_280 OPC_300 OPC_320A OPC_320B OPC_340 OPC_390B OPC_400 OPC_420 OPC_440 OPC_490 OPC_510 OPC_530	
5.1.1.11 <b>Additional BMU Mapping</b>	a) When processing a new or changed ABMU, how do you identify whether the relevant MPANs are Settling as MHHS migrated MPANs and where they are identified as such how do you ensure MDS is notified?	<p>For Question 5.1.1.11 - Your response should include the following:</p> <ul style="list-style-type: none"> <li>Both processes and controls to identify where a new or changed MPAN_ABMU mapping and identify whether the MPAN(s) is/are on Half Hourly or Legacy Settlement.</li> <li>Processes to notify BSC Central Systems of this change, together with the Effective From Settlement Date, via the D0297 where the Metering System is Registered in the MHHS Arrangements.</li> </ul>	MHHS-BR-SU-166 MHHS-BR-SU-168	

<p><b>5.1.1.12 Long Term Vacant</b></p>	<p>a) How do you ensure that only those sites that meet the criteria for treatment as a Long Term Vacant (LTV) are treated as such in accordance with the obligations in the BSC and BSCP709?</p>	<p>For Question 5.1.1.12 - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• Ongoing monitoring is performed to confirm that sites continue to meet the criteria.</li> <li>• Complete and accurate audit trails are in place to demonstrate the Suppliers compliance with the requirements of the BSC and BSCP709.</li> <li>• Details of sites treated as LTV are passed to the LDSO on request.</li> </ul>		
<p><b>5.1.1.13 Agent Compliance</b></p>	<p>a) How do you ensure that your agents are meeting their obligations under the BSC?</p>	<p>For Question 5.1.1.13 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• Controls to ensure that your agents are Qualified and that their qualified status is maintained on an ongoing basis.</li> <li>• Controls to ensure that your agents are compliant with their BSC obligations and a mechanism for assurance that your agents implement BSC Modifications or Changes appropriately.</li> <li>• Adequate contractual arrangements that include clear lines of responsibility and escalation.</li> <li>• Controls are in place to ensure that Metering Equipment is properly commissioned in a timely manner. This includes ensuring any issues are identified during the commissioning of the Metering Equipment, notifying and consulting with the LDSO and/or the NETSO, as applicable.</li> </ul>		

	<p>b) How will you ensure that the SVA MOA you appoint to a <u>Metering System</u> is <u>Meter Operation Code of Practice Agreement</u> (MOCOPA®) accredited in accordance with the <u>Retail Energy Code Metering Accreditation Scheme</u></p>	<p>For Question 5.1.1.13 B – Your response should include the following:</p> <ul style="list-style-type: none"> <li>• Controls to ensure that the SVA MOA you appoint to a Metering System (or any third party agent used by that SVA MOA to perform certain functions that require that third party agent to be MOCOPA® accredited) is Meter MOCOPA® accredited.</li> <li>• How will you monitor that the MOCOPA® accreditation status of the MOA you appoint to a Metering System (or any third party agent used by that SVA MOA to perform certain functions that require that third party agent to be MOCOPA® accredited) is maintained on an ongoing basis?</li> </ul>		
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## 5.1.2 Data Management

Data Management Area	Questions	Guidance Points	MHHS requirements	Participant Responses
<p>5.1.2.1 Amendment of Existing Appointment Conditions</p>	<p>a) What controls do you have in-place to ensure that interface data updates are captured within the relevant systems to support wider business processes for in scope services in line with the BSC and REC obligations brought about by MHHS?</p>	<p>For Question 5.1.2.1 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• Where there has been an amendment to any existing appointments, any controls in place to ensure all updates are identified and maintained accurately within relevant systems.</li> </ul>	<p>MHHS-BR-SU-031 MHHS-BR-SU-032 MHHS-BR-SU-033 MHHS-BR-SU-034 MHHS-BR-SU-035 MHHS-BR-SU-036</p>	
	<p>b) How will you identify when an appointment amendment is required?</p>	<p>For Question 5.1.2.1 B - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• Processes to determine when an existing Service Provider</li> </ul>		



		appointment requires an amendment.		
	c) What controls do you have in place to monitor and review rejected appointment amendments, and where appropriate to resubmit with the required information?	<p>For Question 5.1.2.1 C - Your response should include the following:</p> <ul style="list-style-type: none"> <li>Processes to publish a Supplier Service Appointment Request for a proposed Service Provider amendment via the DIP.</li> <li>Processes to receive, monitor and review rejected appointment amendment requests, and where required, how you will re-issue the request.</li> </ul>		
<b>5.1.2.2 Consumption Amendment</b>	a) What controls do you have in-place to ensure that interface data updates are captured within the relevant systems to support wider business processes for in scope services in line with the BSC and REC obligations brought about by MHHS?	<p>For Question 5.1.2.2 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>Where there has been an amendment to consumption, any controls in place to ensure all updates are identified and maintained accurately within relevant systems</li> </ul>	MHHS-BR-SU-111 MHHS-BR-SU-112 MHHS-BR-SU-116 MHHS-BR-SU-117	
	b) How do you identify when an override read is required and that consumption issued to Settlement is incorrect? Please note the consumption should be amended pre-RF.	<p>For Question 5.1.2.2 B - Your response should include the following:</p> <ul style="list-style-type: none"> <li>Processes to determine when an override read is required. Please refer to how you will ensure consumption is only amended pre-RF.</li> </ul>		
	c) How do you identify when you need to raise a dispute where a consumption amendment is required post-RF? Please note your response should include the checks in place for the materiality criteria of the consumption amendment.	<p>For Question 5.1.2.2 C - Your response should include the following:</p> <ul style="list-style-type: none"> <li>Processes to determine where a dispute needs to be raised if a consumption amendment is required post-RF. Your response should include how you will check</li> </ul>		

		that the Consumption Amendment is over the minimum materiality criteria for any pre-RF amendments.		
<b>5.1.2.3 Customer Direct Contracts</b>	a) What controls do you have in-place to ensure that interface data updates are captured within the relevant systems to support wider business processes for in scope services in line with the BSC and REC obligations brought about by MHHS?	<p>For Question 5.1.2.3 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>Where there has been a change to Customer Direct Contract, any controls in place to ensure all updates are identified and maintained accurately within relevant systems.</li> <li>Processes to obtain Customer Direct Contract response and maintain records accordingly. Your response should also include how you will utilise this information in future requests for Data Service appointments for the notified MPANs.</li> </ul>	MHHS-BR-SU-018 MHHS-BR-SU-030	
<b>5.1.2.4 Registration Data</b>	<p>a) What controls do you have in-place to ensure that updates are captured within all relevant systems to support wider business processes? (this is relevant to:</p> <ul style="list-style-type: none"> <li>Supplier-owned registration data such as IHD, SMSO, and Profile Class/SSC</li> <li>Non-supplier owned registration data such as Meter Point Location (MPL) address, GSP Group ID, Energy Direction, Metered Status, DUoS Tariff ID)</li> </ul>	<p>For Question 5.1.2.4 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>Where there have been updates to registration data, any controls in place to ensure all changes are captured and maintained accurately within relevant systems. Please refer to both: <ul style="list-style-type: none"> <li>Supplier-owned registration data, and</li> <li>Non-Supplier-owned registration data in your response.</li> </ul> </li> </ul>	MHHS-BR-SU-075 MHHS-BR-SU-075.1 MHHS-BR-SU-076 MHHS-BR-SU-077 MHHS-BR-SU-078 MHHS-BR-SU-079 MHHS-BR-SU-080 MHHS-BR-SU-084 MHHS-BR-SU-085 MHHS-BR-SU-086 MHHS-BR-SU-087 MHHS-BR-SU-088 MHHS-BR-SU-089 MHHS-BR-SU-090 MHHS-BR-SU-091 MHHS-BR-SU-092 MHHS-BR-SU-093 MHHS-BR-SU-096.1 MHHS-BR-SU-096.2 MHHS-BR-SU-096.3	

5.1.2.5 <b>Related Meter Point Data</b>	a) What controls do you have in-place to ensure that interface data updates are captured within the relevant systems to support wider business processes for in scope services in line with the BSC and REC obligations brought about by MHHS?	For Question 5.1.2.5 A - Your response should include the following: <ul style="list-style-type: none"> <li>Where you have obtained updates to Related Meter Point Data, any controls in place to ensure all records are maintained completely and accurately in relevant systems.</li> </ul>	MHHS-BR-SU-081 MHHS-BR-SU-083 MHHS-BR-SU-131	
	b) How will you identify related MPANs, as well as identify any changes required to the Metering Point Relationships in the Registration Services?	For Question 5.1.2.5 B - Your response should include the following: <ul style="list-style-type: none"> <li>Processes to identify related MPANs, including processes to determine where changes are required to the Metering Point Relationships in the Registration Services.</li> </ul>		
	c) What controls do you have in place to ensure that the appointment requests are only initiated by the Primary Metering Points but to ensure any data relating to the Secondary Metering Points is updated accordingly?	For Question 5.1.2.5 C - Your response should include the following: <ul style="list-style-type: none"> <li>Controls to ensure that any appointment requests are only received from Primary Metering Points. Your response should also include how you will ensure any changes to data relating to Secondary Metering Points is updated accurately and maintained within all relevant systems.</li> </ul>		
5.1.2.6 <b>Import/Export MPANs</b>	a) What controls do you have in-place to ensure that interface data updates are captured within the relevant systems to support wider business processes for in scope services in line with the BSC and REC obligations brought about by MHHS?	For Question 5.1.2.6 A - Your response should include the following: <ul style="list-style-type: none"> <li>How you will obtain Import/Export linkage updates and maintain records accordingly in all relevant systems.</li> </ul>	MHHS-BR-SU-094 MHHS-BR-SU-096	
	b) How will you identify where changes are needed to Import/Export associations?	For Question 5.1.2.6 B - Your response should include the following:		

		<ul style="list-style-type: none"> <li>Processes to identify where changes to Import/Export linkages are required, and following this, how you will publish an Import/Export linkage update to the Registration Service via a bilaterally agreed method.</li> </ul>		
5.1.2.7 Meter Technical Details (MTDs)	a) What controls do you have in-place to ensure that interface data updates are captured within the relevant systems to support wider business processes for in scope services in line with the BSC and REC obligations brought about by MHHS?	<p>For Question 5.1.2.7 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>Where there have been updates to Meter Technical Details, any controls in place to ensure all records are maintained completely and accurately in relevant systems.</li> </ul>	MHHS-BR-SU-050 MHHS-BR-SU-052 MHHS-BR-SU-066 MHHS-BR-SU-067 MHHS-BR-SU-068 MHHS-BR-SU-069 MHHS-BR-SU-070 MHHS-BR-SU-071 MHHS-BR-SU-072 MHHS-BR-SU-073 MHHS-BR-SU-132 MHHS-BR-SU-133	
	b) How will you identify discrepancies between metering details received from Supplier Meter Registration Service (SMRS) with information from the Metering Service?	<p>For Question 5.1.2.7 B - Your response should include the following:</p> <ul style="list-style-type: none"> <li>Processes to identify any discrepancies between metering details received from the SMRS, and information from the Metering Service, and how these discrepancies will be flagged to the appropriate agent in a timely manner.</li> </ul>		

## 5.2 Advanced Data Services

### 5.2.1 Business Processes

Advanced Data Services must be Qualified as a Data Service in line with the Qualification Process and associated BSCPs.

Business Process Area	Questions	Guidance Points	MHHS requirements	Participant Responses
<p>5.2.1.1 <b>Appointments/De-Appointments</b></p> <p>In line with MHHSP-BP002 &amp; MHHSP-BP003</p>	<p>a) Aside from the functional elements tested in PIT/SIT/QT, what developments have been made to your E2E business processes? (e.g. inputs, workflows, integrations, and downstream systems and processes)</p>	<p>For Question 5.2.1.1 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>A disclosure of developments made to systems and processes which have not been tested as part of PIT/SIT/QT. This could be because, for example, you have made changes to upstream, downstream, and/or interfacing systems which have not been captured within the scope of the functional test scenarios and scripts but will form part of the wider business process requirements as defined in the BSC Codes.</li> </ul>	<p>MHHS-BR-DS-003 MHHS-BR-DS-005 MHHS-BR-DS-009 MHHS-BR-DS-022 MHHS-BR-DS-008.1 MHHS-BR-DS-026.3 MHHS-BR-DS-026.4 MHHS-BR-DS-026.6 MHHS-BR-DS-026.7 MHHS-BR-DS-104 MHHS-BR-DS-108</p>	

		<ul style="list-style-type: none"> <li>• Additionally, this may be because you are placing reliance on testing completed by other MHHS Participants for common systems, but the integration with your own end-to-end solution has not yet been tested.</li> <li>• Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information.</li> </ul>		
	b) How have these E2E business processes been tested (e.g., testing within your own UIT environment)?	<p>For Question 5.2.1.1 B - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• How will you gain assurance that even with these developments, your wider end-to-end systems and processes will still enable you to operate in line with your BSC Code Requirements. For example, will you perform further testing in your own UIT environment, and if so, what will be the scope of this testing and who will be involved.</li> </ul>		
	c) For advanced meters how will you collect the opening UTC period level data?	<p>For Question 5.2.1.1 B – Your response should include the following:</p> <ul style="list-style-type: none"> <li>• The process for deleting any metering details received where a proposed appointment has been rejected</li> <li>• Where an appointment has been accepted, how you will attempt to collect the UTC period level data from an advanced meter. Including, where remote access has not been possible.</li> </ul>		

	d) Once de-appointed how will you collect the closing UTC period level data?	<p>For Question 5.2.1.1 D – Your response should include the following:</p> <ul style="list-style-type: none"> <li>Once de-appointed, how you will collect the closing UTC period level data to use for final data processing. Including where remote or local access has not been possible.</li> <li>The process for storing valid register reads for use in the estimation process where no better data is available.</li> </ul>		
	e) How do you receive the notification from the Registration Service and any supporting information confirming the ADS appointment?	<p>For Question 5.2.1.1 E - Your response should address the following:</p> <ul style="list-style-type: none"> <li>The process and/or systems used to receive a new ADS appointment and MPAN details from the Registration Service, and how these records are maintained within your system.</li> </ul>		
		<ul style="list-style-type: none"> <li></li> </ul>		
<b>5.2.1.2 Identifying Faults</b>	a) Aside from the functional elements tested in PIT/SIT/QT, what developments have been made to your E2E business processes? (e.g. inputs, workflows, integrations, and downstream systems and processes)	<p>For Question 5.2.1.2 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>A disclosure of developments made to systems and processes which have not been tested as part of PIT/SIT/QT. This could be because, for example, you have made changes to upstream, downstream, and/or interfacing systems which have not been captured within the scope of the functional test scenarios and scripts but will form part of the wider business process requirements as defined in the BSC Codes.</li> </ul>	MHHS-BR-DS-147	

		<ul style="list-style-type: none"> <li>• Additionally, this may be because you are placing reliance on testing completed by other MHHS Participants for common systems, but the integration with your own end-to-end solution has not yet been tested.</li> <li>• Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information.</li> </ul>		
	b) How have these E2E business processes been tested (e.g., testing within your own UIT environment)?	<p>For Question 5.2.1.2 B - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• How will you gain assurance that even with these developments, your wider end-to-end systems and processes will still enable you to operate in line with your BSC Code Requirements. For example, will you perform further testing in your own UIT environment, and if so, what will be the scope of this testing and who will be involved.</li> </ul>		
	c) The Advanced Data Service (ADS) needs to identify any faulty metering equipment and notify the Advanced Metering Service and the Supplier. What is your process for this?	<p>For Question 5.2.1.2 C – Your response should address the following:</p> <ul style="list-style-type: none"> <li>• How you will send the notification (either in a system/portal or otherwise e.g. email) to the Supplier and Advanced Metering Service when there is a fault with the metering equipment</li> <li>• The process for investigating faults in a timely manner once notification has been received</li> <li>• How feedback of faults (including progress of resolution and any delays encountered) will be</li> </ul>		



		<p>provided to the Supplier upon investigation</p> <p>How faults will be tracked and monitored internally. This may include a fault log or fault report that contains details of any past and present faults.</p>		
5.2.1.3 Metering	a) Aside from the functional elements tested in PIT/SIT/QT, what developments have been made to your E2E business processes? (e.g. inputs, workflows, integrations, and downstream systems and processes)	<p>For Question 5.2.1.3 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>A disclosure of developments made to systems and processes which have not been tested as part of PIT/SIT/QT. This could be because, for example, you have made changes to upstream, downstream, and/or interfacing systems which have not been captured within the scope of the functional test scenarios and scripts but will form part of the wider business process requirements as defined in the BSC Codes.</li> <li>Additionally, this may be because you are placing reliance on testing completed by other MHHS Participants for common systems, but the integration with your own end-to-end solution has not yet been tested.</li> <li>Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information.</li> </ul>	<p>MHHS-BR-DS-045  MHHS-BR-DS-117  MHHS-BR-DS-119  MHHS-BR-DS-123  MHHS-BR-DS-134  MHHS-BR-DS-146  MHHS-BR-DS-148  MHHS-BR-DS-148.1</p>	
	b) How have these E2E business processes been tested (e.g., testing within your own UIT environment)?	<p>For Question 5.2.1.3 B - Your response should include the following:</p> <ul style="list-style-type: none"> <li>How will you gain assurance that even with these developments, your</li> </ul>		

		wider end-to-end systems and processes will still enable you to operate in line with your BSC Code Requirements. For example, will you perform further testing in your own UIT environment, and if so, what will be the scope of this testing and who will be involved.		
	c) How do you identify related MPANs or Import/Export linked meters?	For Question 5.2.1.3 C – Your response should include the following: <ul style="list-style-type: none"> <li>The process for identifying: <ul style="list-style-type: none"> <li>Related MPANs</li> <li>Import/Export linked meters</li> </ul> </li> </ul>		
	d) How do you receive/maintain all relevant Meter Technical Details?	For Question 5.2.1.3 D – Your response should include the following: <ul style="list-style-type: none"> <li>How you ensure all MTDs have been received for both Related or Import/Export group MPANs</li> <li>The process for maintaining records of all MTDs, and where required, investigating any discrepancies with data received from the Registration Service</li> <li>How you have ensured you have up to date metering details (MTDs), including how you will maintain records of MTDs and investigate any discrepancies that may exist where required</li> </ul>		
	e) For Metering Systems where you retrieve data from the Metering System, how have you demonstrated that your data retrieval systems (including Hand Held Units and any third party systems) are appropriate to communicate with Metering	For Question 5.2.1.3 E – In your response: <ul style="list-style-type: none"> <li>Please confirm that Protocol Approval for a Meter or Asset Meter Types has been achieved or where not, that the Exelon Metering Team</li> </ul>		

	Equipment in accordance with BSCP601?	have been contacted to apply for Protocol Approval.		
	f) For Metering Systems that require proving tests what controls do you have in place to ensure that proving tests are performed in all the circumstances and timescales?	<p>For Question 5.2.1.3 F – In your response:</p> <ul style="list-style-type: none"> <li>The ADS agent is required to perform Proving Tests at the request of the SVA Meter Operator Agent. BSCP702 3.5 specifies the procedures to be used for different proving methods. BSCP702 Appendix 4.6 for SVA Metering Systems sets out, the circumstances in which a proving test will be required.</li> </ul>		
	g) How are the controls and processes implemented to ensure the aspects of Shared SVA Meter Arrangements?	<p>For Question 5.5.1.3 G – In your response:</p> <ul style="list-style-type: none"> <li>Ensure accurate notification and recording of Primary and Secondary Supplier details along with their associated MSIDs. Confirm consistent SMRA registration details for each Shared SVA Meter arrangement, appointing only one MOA and one Data Service.</li> <li>Maintain timely and accurate transfer of split Meter data allocations between each MSID to the appropriate LDSOs</li> </ul>		
	h) Where you are collecting data from the Metering System how do you ensure that the clocks are checked and appropriate corrective action is taken if any errors are detected?	<p>For Question 5.2.1.3 H – Your response should include the following:</p> <ul style="list-style-type: none"> <li>Controls in place to ensure the regular checking of Outstation or Asset Meter Clocks.</li> <li>Formal reporting of clock inaccuracies.</li> </ul>		

		<ul style="list-style-type: none"> <li>Monitoring in place to ensure completeness and accuracy of action taken.</li> </ul>		
5.2.1.4 <b>Operational Requirements</b>	a) What controls do you have in place to ensure that you meet all of your requirements as outlined in the Operational Choreography Version 5.4	<p>For Question 5.2.1.4 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>Both preventative controls and detective controls, which could include your monitoring activities and processes for manual intervention. How you will ensure you meet specific processing and response SLAs (these may be referenced in your answers above)</li> <li>How you will ensure you meet your operational requirements which may not have been tested during functional testing, such as OPC_320A to make data available to other parties (as applicable) by 06:00hrs the next Working Day after receiving a notification of disconnection?</li> </ul>	OPC_061 OPC_150 OPC_170A OPC_170B OPC_190 OPC_200 OPC_210 OPC_280 OPC_300 OPC_340 OPC_360 OPC_370 OPC_390 OPC_420 OPC_440 OPC_470 OPC_490 OPC_550 OPC_570 OPC_580	
5.2.1.5 <b>Change of Energisation</b>	a) Aside from the functional elements tested in PIT/SIT/QT, what developments have been made to your E2E business processes? (e.g. inputs, workflows, integrations, and downstream systems and processes)	<p>For Question 5.2.1.5 A – Your response should address the following:</p> <ul style="list-style-type: none"> <li>A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above.</li> <li>Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information.</li> <li>How you will gain assurance that even with these additional changes, your wider end-to-end systems and processes will still enable you to</li> </ul>	MHHS-BR-DS-106 MHHS-BR-DS-108 MHHS-BR-DS-116	

		<p>operate in line with your BSC Code Requirements, as above.</p> <ul style="list-style-type: none"> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> </ul>		
	b) How have these E2E business processes been tested (e.g., testing within your own UIT environment)?			
	c) What steps do you follow to obtain and maintain records of Registration Service Notification of Change of Energisation Status updates via the DIP?	<p>For Question 5.2.1.5 C – In your response:</p> <ul style="list-style-type: none"> <li>When receiving the Registration Service Notification of Change of Energisation, what controls do you have in place to ensure that you keep and maintain a record of these notifications?</li> </ul>		
	d) How do you ensure you have accurately estimated meter readings when no valid readings are received from the Metering Service within 5 working days of a change in Energisation Status?	<p>For Question 5.2.1.5 D – In your response:</p> <ul style="list-style-type: none"> <li>How will you generate an estimated reading where no reads are provided alongside a change in Energisation Status, and how you will ensure this is completed within the 5 working day SLA?</li> </ul>		
	e) How do you handle previously submitted UTC Period Level Consumption Data in settlements, upon notification of an energisation status change with no recorded consumption, especially when this change is retrospective?	<p>For Question 5.2.1.5 E – In your response:</p> <ul style="list-style-type: none"> <li>Processes for when a Change of Energisation notification has been received for a backdated date when there has been no recorded consumption.</li> </ul>		
<b>5.2.1.6 Migration Requirements</b>	a) What controls are in place to ensure the appointment process is followed for Migration?	<p>For Question 5.2.1.6 A – Your response should include the following:</p>	MHHS-Migration-CoA(DS)-DS-002	

		<ul style="list-style-type: none"> <li>• What controls are in place to ensure the D0036 containing 3 months of history can be received and processed?</li> <li>• What controls are in place to manage De-appointments following a Registration cancellation, For example, during a reverse migration how will you ensure that you continue to monitor and meet your SLAs?</li> </ul>	MHHS-Migration-Mis-DS-001 MHHS-Migration-Mis-DS-002 MHHS-Migration-Mis-DS-003 MHHS-Migration-Mis-DS-004 MHHS-Migration-Mis-DS-005 MHHS-Migration-Mis-DS-006	
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## 5.2.2 Data Management

Data Management Area	Questions	Guidance Points	MHHS requirements	Participant Responses
5.2.2.1 Consumption Data	a) What controls do you have in-place to ensure that interface data updates are captured within the relevant systems to support wider business processes for in scope services in line with the BSC obligations brought about by MHHS?	For Question 5.2.2.1 A – Your response should address the following: <ul style="list-style-type: none"> <li>• When updates are received what automated and manual processes are in place to update the system in line with business processes.</li> </ul>	MHHS-BR-DS-072 MHHS-BR-DS-074 MHHS-BR-DS-076 MHHS-BR-DS-079 MHHS-BR-DS-082 MHHS-BR-DS-083 MHHS-BR-DS-086 MHHS-BR-DS-088 MHHS-BR-DS-091 MHHS-BR-DS-160 MHHS-BR-DS-166	
	b) How have you integrated the Advanced Validation & Estimation Method statement into your estimation procedures?	For Question 5.2.2.1 B – Your response should address the following activities, which should be completed in line with the Advanced Validation and Estimation Method statement:		

		<ul style="list-style-type: none"> <li>There are several steps required in the Advance Validation &amp; Estimation Method statement. How have these been incorporated into normal business processes?</li> </ul>		
c)	When a new load shape is available how will you reprocess the previously submitted data?	<p>For Question 5.2.2.1 C –Your response should address the following:</p> <ul style="list-style-type: none"> <li>As outlined in the Advanced Validation &amp; Estimation Method, please describe your process for handling Load Shape Data, including how you receive this information and the procedures you follow to reprocess previously submitted data in exceptional circumstances.</li> </ul>		
d)	How do you ensure you accurately obtain and maintain records of Override Reads sent by the Supplier via the DIP?	<p>For Question 5.2.2.1 D –Your response should address the following:</p> <ul style="list-style-type: none"> <li>Process to include obtaining overriding reads and maintaining overriding reads which has been sent by the Supplier.</li> </ul>		
e)	What are the necessary steps for you to publish a Consumption Amendment rejection on the Data Integration Platform when validation fails?	<p>For Question 5.2.2.1 E –Your response should address the following:</p> <ul style="list-style-type: none"> <li>Processes to including details of the appropriate interfaces and specifying the types of rejection reasons that should be communicated.</li> </ul>		
f)	What controls do you have in place to address any exception on Data Aggregation Exceptions as laid out in BSCP702 and BSCP603?	<p>For Question 5.2.2.1 F – Your response should address the following:</p>		

		<ul style="list-style-type: none"> <li>Processes to resolve any exceptions reported on the Data Aggregation report, including procedures in place which specify the action to be taken for each error code reported.</li> <li>Any additional methods used by the ADS to report on and resolve exceptions.</li> <li>Processes in place to monitor the level and type of exceptions received to facilitate root cause analysis.</li> </ul>		
	g) Once consumption has been detected on de-energised metering, the Data Service reports any detection to the Supplier and SVA MOA as per BSCP702	<p>For Question 5.2.2.1 G – Your response should address the following:</p> <ul style="list-style-type: none"> <li>Complete reporting via a D0001 data flow to Supplier SVA Metering Systems or AMVLP for Asset Metering Systems and the relevant SVA MOA of any consumption detected on a de-energised Meter Systems.</li> <li>Accurate and timely follow up of subsequent instruction received from the Supplier or AMVLP.</li> </ul>		
<b>5.2.2.2 Meter Technical Details (MTDs)</b>	a) What controls do you have in-place to ensure that interface data updates are captured within the relevant systems to support wider business processes for in scope services in line with the BSC and REC obligations brought about by MHHS?	<p>For Question 5.2.2.2 A – Your response should address the following:</p> <ul style="list-style-type: none"> <li>When updates are received what automated and manual processes are in place to update the system in line with business processes</li> </ul>	MHHS-BR-DS-005 MHHS-BR-DS-006.1	
	b) How do you receive MTDs through different sources e.g. DTN and DIP?	<p>For Question 5.2.2.2 B – Your response should address the following:</p>		



		<ul style="list-style-type: none"> <li>Aside from the DIP and DTN do you have arrangements with Metering Services to receive MTDs in a different way?</li> </ul>		
	c) How do you investigate discrepancies when MTDs are received from the DIP?	<p>For Question 5.2.2.2 C – Your response should address the following:</p> <ul style="list-style-type: none"> <li>The process for investigating any discrepancies against data received DIP, who is contacted, how are they contacted and what automated and manual steps are involved?</li> </ul>		
	d) How will you process MTDs received from a metering service which does not turn out to be the metering service appointed?	<p>For Question 5.2.2.2 D - Your response should address the following:</p> <ul style="list-style-type: none"> <li>Where details are received from a prospective incoming Metering Service that is not appointed when the Data Service appointment commences, the process for ensuring these details are correct, or that further, revised MTDs have been received from the correct Metering Service appointed.</li> </ul>		
5.2.2.3 Meter Readings	a) How will you validate any meter readings received?	<p>For Question 5.2.2.3 A – Your response should address the following:</p> <ul style="list-style-type: none"> <li>When meter readings are received from site visits or customer-provided readings, how are they validated? Please outline if there are any differences between the two methods.</li> </ul>	MHHS-BR-DS-049 MHHS-BR-DS-098 MHHS-BR-DS-098.1 MHHS-BR-DS-111	
	b) How do you ensure that your obtained cumulative reads via the DIP are stored and used in the estimation process?	<p>For Question 5.2.2.3 B – Your response should address the following:</p>		

		<ul style="list-style-type: none"> <li>Processes and/or controls of previously obtained actual readings used to estimate reads</li> </ul>		
	c) When the meter is unable to be read what process and follow up action do you take?	<p>For Question 5.2.2.3 C – Your response should address the following:</p> <ul style="list-style-type: none"> <li>Processes to investigate where meter reads cannot be obtained.</li> </ul>		
<b>5.5.2.4 Customer Direct Contract</b>	a) What controls do you have in-place to ensure that interface data updates are captured within the relevant systems to support wider business processes for in scope services in line with the BSC and REC obligations brought about by MHHS?	<p>For Question 5.2.2.4 A – Your response should include the following:</p> <ul style="list-style-type: none"> <li>Controls in place to ensure that any appointments and updates to Customer Direct Contracts are reflected in the Registration Services.</li> <li>Controls in place to identify when Customer Direct Contracts need to be removed, and how you will ensure these are published in a timely manner.</li> </ul>	<p>MHHS-BR-DS-031  MHHS-BR-DS-032  MHHS-BR-DS-033  MHHS-BR-DS-034  MHHS-BR-DS-035  MHHS-BR-DS-036  MHHS-BR-DS-037</p>	
<b>5.2.2.5 Meter Advance Reconcillations (MARs)</b>	a) What controls do you have in place to ensure that manual MARs are performed accurately as per BSCP702? (BSCP702 for Metering Systems and BSCP603 for Asset Metering Systems.)	<p>For Question 5.2.2.5 A – Your response should include the following:</p> <ul style="list-style-type: none"> <li>Process should be in place to identify Metering Systems require a MAR to be performed.</li> <li>MARs are scheduled and performed.</li> <li>Appropriate checks are performed wen using the Meter or Asset Meter, register readings taken during any site visit.</li> <li>MARs calculated accurately.</li> <li>Appropriate actions are taken in response to the failure to perform a MAR.</li> </ul>		

		<ul style="list-style-type: none"> <li>Follow up of any exceptions identified in the completion of the MAR process.</li> </ul>		
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### 5.3 Smart Data Services (SDS)

#### 5.3.1 Business Processes

Smart Data Services must be Qualified as a Data Service in line with the Qualification Process and associated BSCPs.

Business Process Area	Questions	Guidance Points	MHHS requirements	Participant Responses
5.3.1.1 Meter Data Retriever (MDR)	<p>a) Are you intending on undertaking User Entry Process (UEP) for MDR as defined in Section H1 of the Smart Energy Code (SEC)?</p> <p>If not, what controls have you got in place to ensure you have a Qualified MDR for all Data Communications Company (DCC) enrolled meters as defined in SEC?</p>	<p>If you intend to qualify as an MDR, please state this and include details if you will operate solely as an internal MDR, or if you will provide these services externally.</p>	<p>MHHS-BR-DS-010 MHHS-BR-DS-011.1 MHHS-BR-DS-009 MHHS-BR-DS-019 MHHS-BR-DS-041 MHHS-BR-DS-043 MHHS-BR-DS-130 MHHS-BR-DS-132 MHHS-BR-DS-136</p>	
	<p>What controls have you got in place to ensure that you are able to communicate with an MDR(which could be the Supplier)?</p>	<p>If you do not plan to qualify as an MDR, please include:</p> <ul style="list-style-type: none"> <li>The process for ensuring there is a qualified MDR (which could be the Supplier) in place for all DCC enrolled meters</li> <li>The chosen communication methods between the SDS and an MDR (which could be be the Supplier).</li> </ul>		

	<p>b) What processes do you have in place to ensure that you can carry out, when required, a change of MDR?</p>	<p>For Question 5.3.1.1 – Your response should include the following:</p> <ul style="list-style-type: none"> <li>Where a Change of MDR is needed, what are your processes and controls to ensure that this is carried out correctly.</li> </ul>		
	<p>c) If applicable, how will you notify/terminate third party service providers, such as the Meter Reading Service and Meter Data Retrieval Service, according to the agreed bilateral mechanism?</p>	<p>For Question 5.3.1.1 D – Your response should include the following:</p> <ul style="list-style-type: none"> <li>This could include methods like email, API calls, or secure FTP. The notification should contain relevant data (e.g., meter readings) in the agreed format.</li> </ul>		
	<p>d) Can you explain how you, your MDR or supplier collecting data for you will manage smart meter data request rejections via the DCC?</p>	<p>For Question 5.3.1.1 E – Your response should include the following:</p> <ul style="list-style-type: none"> <li>Processes on how you will manage rejections including rejection reasons, initial responses, any diagnostic procedures, rectifying any issues, escalation processes and reporting and any preventive measures.</li> </ul>		
<p>5.3.1.2 <b>Appointment and/or De-Appointment</b></p>	<p>a) Aside from the functional elements tested in PIT/SIT/QT, what developments have been made to your E2E business processes? (e.g. inputs, workflows, integrations, and downstream systems and processes)</p>	<p>For Question 5.3.1.2 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>A disclosure of developments made to systems and processes which have not been tested as part of PIT/SIT/QT. This could be because, for example, you have made changes to upstream, downstream, and/or interfacing systems which have not been captured within the scope of the functional test scenarios and scripts but will form part of the wider business process requirements as defined in the BSC Codes.</li> <li>Additionally, this may be because you are placing reliance on testing completed by other MHHS Participants for common</li> </ul>	<p>MHHS-BR-DS-008.1 MHHS-BR-DS-023.1 MHHS-BR-DS-022 MHHS-BR-DS-024 MHHS-BR-DS-104</p>	

		<p>systems, but the integration with your own end-to-end solution has not yet been tested.</p> <ul style="list-style-type: none"> <li>Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information.</li> </ul>		
	b) How have these E2E business processes been tested (e.g., testing within your own UIT environment)?	<p>For Question 5.3.1.2 B - Your response should include the following:</p> <ul style="list-style-type: none"> <li>How will you gain assurance that even with these developments, your wider end-to-end systems and processes will still enable you to operate in line with your BSC Code Requirements. For example, will you perform further testing in your own UIT environment, and if so, what will be the scope of this testing and who will be involved.</li> </ul>		
	c) On de-appointment and in absence of an actual read for a traditional meter, how do you ensure you send an estimated read in line with the requirement?	<p>For Question 5.3.1.2 C – Your response should include the following:</p> <ul style="list-style-type: none"> <li>Where you have rejected a proposed appointment, the process for deleting any metering details that may have been received as soon as is as practical</li> <li>Once de-appointed and in the absence of an actual valid read, the process to send an estimated read to the new SDS, LDSO and old Supplier for midnight on the day following de-appointment</li> </ul>		
	d) For smart meters how do you ensure you send the opening cumulative reading and, where available, the register reads?	<p>For Question 5.3.1.2 D – Your response should include the following:</p> <ul style="list-style-type: none"> <li>For Advanced and Smart meters, the process of obtaining actual consumption history up to the point of de-appointment for submission to settlements</li> </ul>		

		<ul style="list-style-type: none"> <li>The process for downloading, maintaining, and sending cumulative and register reads for Smart meters</li> </ul>		
5.3.1.3 Meter Readings	a) Aside from the functional elements tested in PIT/SIT/QT, what developments have been made to your E2E business processes? (e.g. inputs, workflows, integrations, and downstream systems and processes)	<p>For Question 5.3.1.3 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>A disclosure of developments made to systems and processes which have not been tested as part of PIT/SIT/QT. This could be because, for example, you have made changes to upstream, downstream, and/or interfacing systems which have not been captured within the scope of the functional test scenarios and scripts but will form part of the wider business process requirements as defined in the BSC Codes.</li> <li>Additionally, this may be because you are placing reliance on testing completed by other MHHS Participants for common systems, but the integration with your own end-to-end solution has not yet been tested.</li> <li>Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information.</li> </ul>	<p>MHHS-BR-DS-046  MHHS-BR-DS-047  MHHS-BR-DS-048  MHHS-BR-DS-045  MHHS-BR-DS-053  MHHS-BR-DS-098  MHHS-BR-DS-098.1  MHHS-BR-DS-111  MHHS-BR-DS-160</p>	
	b) How have these E2E business processes been tested (e.g., testing within your own UIT environment)?	<p>For Question 5.3.1.3 B - Your response should include the following:</p> <ul style="list-style-type: none"> <li>How will you gain assurance that even with these developments, your wider end-to-end systems and processes will still enable you to operate in line with your BSC Code Requirements. For example, will you perform further testing in your own UIT environment, and if so, what will be the scope of this testing and who will be involved.</li> </ul>		

	c) What third party involvement (if any) is involved in the collection process?	<p>For Question 5.3.1.3 C – Your response should include the following:</p> <ul style="list-style-type: none"> <li>• If you plan to utilise third parties for collecting meter reads, how will responsibilities be split between the SDS and third party</li> <li>• How you will manage, schedule, and arrange site visits for Traditional Meters to enable submission of consumption data for settlement</li> </ul>		
	d) When the meter is unable to be read what process and follow up action do you take?	<p>For Question 5.3.1.3 D – Your response should include the following:</p> <ul style="list-style-type: none"> <li>• Processes to investigate where meter reads cannot be obtained, and where this process differs with Smart meters (if any).</li> </ul>		
	e) How does this process vary dependant on when the meter type is Smart and it has been agreed with the Supplier to obtain an on-site read?	<p>For Question 5.3.1.3 E – Your response should include the following:</p> <ul style="list-style-type: none"> <li>• If data cannot be obtained, the process to create and publish best estimates as defined by the appropriate Method Statement within the 6 working day timeframe.</li> </ul>		
	f) How do you ensure they accurately obtain and maintain records of Override Reads sent by the Supplier via the DIP?	<p>For Question 5.3.1.3 F – Your response should include the following</p> <ul style="list-style-type: none"> <li>• Processes to include obtaining overriding reads and maintaining overriding reads which has been sent by the Supplier.</li> </ul>		
5.3.1.4 <b>Meter Technical Details (MTDs)</b>	a) Aside from the functional elements tested in PIT/SIT/QT, what developments have been made to your E2E business processes? (e.g. inputs, workflows, integrations, and downstream systems and processes)	<p>For Question 5.3.1.4 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• A disclosure of developments made to systems and processes which have not been tested as part of PIT/SIT/QT. This could be because, for example, you have made changes to upstream, downstream,</li> </ul>	<p>MHHS-BR-DS-003  MHHS-BR-DS-006  MHHS-BR-DS-006.1  MHHS-BR-DS-016  MHHS-BR-DS-121  MHHS-BR-DS-023.1</p>	

		<p>and/or interfacing systems which have not been captured within the scope of the functional test scenarios and scripts but will form part of the wider business process requirements as defined in the BSC Codes.</p> <ul style="list-style-type: none"> <li>• Additionally, this may be because you are placing reliance on testing completed by other MHHS Participants for common systems, but the integration with your own end-to-end solution has not yet been tested.</li> <li>• Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information.</li> </ul>		
	b) How have these E2E business processes been tested (e.g., testing within your own UIT environment)?	<p>For Question 5.3.1.4 B - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• How will you gain assurance that even with these developments, your wider end-to-end systems and processes will still enable you to operate in line with your BSC Code Requirements. For example, will you perform further testing in your own UIT environment, and if so, what will be the scope of this testing and who will be involved.</li> </ul>		
	c) How do you receive MTDs through different sources e.g. DTN and MDR/DIP?	<p>For Question 5.3.1.4 C - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• The method(s) used to receive and maintain records of MTDs for Traditional Meters</li> </ul>		
	d) How do you investigate discrepancies when MTDs are received from the DIP?	<p>For Question 5.3.1.4 D - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• Where Related MPANs or Import/Export linked meters exist, the process to ensure</li> </ul>		



		MTDs are received for all MPANs in the Related MPAN or Import/Export group		
	e) How will you process MTDs received from a metering service which does not turn out to be the metering service appointed?	<p>For Question 5.3.1.4 E – Your response should include the following:</p> <ul style="list-style-type: none"> <li>The process for investigating any discrepancies against data received from the Registration Services</li> </ul>		
	f) How do you maintain your metering recording accurately?	<p>For Question 5.3.1.4 F - Your response should include the following:</p> <ul style="list-style-type: none"> <li>Where details are received from a prospective incoming Metering Service that is not appointed when the Data Service appointment commences, the process for ensuring these details are correct, or that further, revised MTDs have been received from the correct Metering Service appointed</li> </ul>		
5.3.1.5 Identify Faults	a) Aside from the functional elements tested in PIT/SIT/QT, what developments have been made to your E2E business processes? (e.g. inputs, workflows, integrations, and downstream systems and processes)	<p>For Question 5.3.1.5 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>A disclosure of developments made to systems and processes which have not been tested as part of PIT/SIT/QT. This could be because, for example, you have made changes to upstream, downstream, and/or interfacing systems which have not been captured within the scope of the functional test scenarios and scripts but will form part of the wider business process requirements as defined in the BSC Codes.</li> <li>Additionally, this may be because you are placing reliance on testing completed by other MHHS Participants for common systems, but the integration with your own end-to-end solution has not yet been tested.</li> </ul>	MHHS-BR-DS-147 MHHS-BR-DS-147.1	

		<ul style="list-style-type: none"> <li>Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information.</li> </ul>		
	b) How have these E2E business processes been tested (e.g., testing within your own UIT environment)?	<p>For Question 5.3.1.5 B - Your response should include the following:</p> <ul style="list-style-type: none"> <li>How will you gain assurance that even with these developments, your wider end-to-end systems and processes will still enable you to operate in line with your BSC Code Requirements. For example, will you perform further testing in your own UIT environment, and if so, what will be the scope of this testing and who will be involved.</li> </ul>		
	c) The SDS needs to identify any faulty metering equipment and notify the Smart Metering Service and the Supplier. What is your process for this?	<p>For Question 5.3.1.5 C – Your response should include the following:</p> <ul style="list-style-type: none"> <li>Please describe your prescribed method as agreed with the Supplier to notify them of any faults, including how you will monitor faults and follow up with the Supplier if required.</li> </ul>		
<b>5.3.1.6 Change of Metering</b>	a) Aside from the functional elements tested in PIT/SIT/QT, what developments have been made to your E2E business processes? (e.g. inputs, workflows, integrations, and downstream systems and processes)	<p>For Question 5.3.1.6 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>A disclosure of developments made to systems and processes which have not been tested as part of PIT/SIT/QT. This could be because, for example, you have made changes to upstream, downstream, and/or interfacing systems which have not been captured within the scope of the functional test scenarios and scripts but will form part of the wider business process requirements as defined in the BSC Codes.</li> <li>Additionally, this may be because you are placing reliance on testing completed by</li> </ul>	<p>MHHS-BR-DS-146  MHHS-BR-DS-121  MHHS-BR-DS-117  MHHS-BR-DS-123</p>	

		<p>other MHHS Participants for common systems, but the integration with your own end-to-end solution has not yet been tested.</p> <ul style="list-style-type: none"> <li>Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information.</li> </ul>		
	b) How have these E2E business processes been tested (e.g., testing within your own UIT environment)?	<p>For Question 5.3.1.6 B - Your response should include the following:</p> <ul style="list-style-type: none"> <li>How will you gain assurance that even with these developments, your wider end-to-end systems and processes will still enable you to operate in line with your BSC Code Requirements. For example, will you perform further testing in your own UIT environment, and if so, what will be the scope of this testing and who will be involved.</li> </ul>		
	c) How do you identify related MPANs or Import/Export linked meters?	<p>For Question 5.3.1.6 C – Your response should include the following:</p> <ul style="list-style-type: none"> <li>The process for identifying: <ul style="list-style-type: none"> <li>Related MPANs</li> <li>Import/Export linked meters</li> </ul> </li> </ul>		
<b>5.3.1.7 Operational Requirements</b>	a) What controls do you have in place to ensure that you meet all of your requirements as outlined in the Operational Choreography Version 5.4?	<p>For Question 5.3.1.7 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>Both preventative controls and detective controls, which could include your monitoring activities and processes for manual intervention. How you will ensure you meet specific processing and response SLAs (these may be referenced in your answers above)</li> <li>How you will ensure you meet your operational requirements which may not have been tested during functional testing?</li> </ul>	<p>OPC_161  OPC_150  OPC_170A  OPC_170B  OPC_190  OPC_200  OPC_210  OPC_280  OPC_300  OPC_340  OPC_360</p>	

			OPC_370 OPC_390 (relates to IF-024) OPC_420 OPC_440 OPC_470 OPC_490 OPC_550 OPC_570 OPC_580	
<b>5.3.1.8 Change of Energisation</b>	a) Aside from the functional elements tested in PIT/SIT/QT, what developments have been made to your E2E business processes? (e.g. inputs, workflows, integrations, and downstream systems and processes)	For Question 5.3.1.8 A - Your response should include the following: <ul style="list-style-type: none"> <li>• A disclosure of developments made to systems and processes which have not been tested as part of PIT/SIT/QT. This could be because, for example, you have made changes to upstream, downstream, and/or interfacing systems which have not been captured within the scope of the functional test scenarios and scripts but will form part of the wider business process requirements as defined in the BSC Codes.</li> <li>• Additionally, this may be because you are placing reliance on testing completed by other MHHS Participants for common systems, but the integration with your own end-to-end solution has not yet been tested.</li> <li>• Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information.</li> </ul>	MHHS-BR-DS-106	

	b) How have these E2E business processes been tested (e.g., testing within your own UIT environment)?	For Question 5.3.1.8 B - Your response should include the following: <ul style="list-style-type: none"> <li>How will you gain assurance that even with these developments, your wider end-to-end systems and processes will still enable you to operate in line with your BSC Code Requirements. For example, will you perform further testing in your own UIT environment, and if so, what will be the scope of this testing and who will be involved.</li> </ul>		
	c) What steps do you follow to obtain and maintain records of Registration Service Notification of Change of Energisation Status updates via the DIP?	For Question 5.3.1.8 C – Your response should include the following: <ul style="list-style-type: none"> <li>When receiving the Registration Service Notification of Change of Energisation, what controls do you have in place to ensure that you keep and maintain a record of these notifications?</li> </ul>		
	d) How do you ensure you have accurately estimated meter readings when no valid readings are received from the Metering Service within 5 working days of a change in Energisation Status?	For Question 5.3.1.8 D – Your response should include the following: <ul style="list-style-type: none"> <li>How you will generate an estimated reading where no reads are provided alongside a change in Energisation Status, and how you will ensure this is completed within the 5 working day SLA.</li> </ul>		
<b>5.3.1.9 Migration Requirements</b>	What controls do you have in-place to ensure the appointment process is followed for Migration?	For Question 5.3.1.9 A – Your response should include the following: <ul style="list-style-type: none"> <li>What controls are in place to ensure a read is retrieved at midnight and sent via IF-041 to the DIP?</li> <li>What controls are in place to manage De-appointments following a Registration cancellation, For example, during a reverse migration how will you ensure that you continue to monitor and meet your SLAs?</li> </ul>	MHHS-Migration-CoA (DS)-DS-001 MHHS-Migration-CoA (DS)-DS-003 MHHS-Migration-Mis-DS-001 MHHS-Migration-Mis-DS-002 MHHS-Migration-Mis-DS-003	

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### 5.3.2 Data Management

Data Management Area	Questions	Guidance Points	MHHS requirements	Participant Responses
5.3.2.1 Estimation Values	a) What controls do you have in-place to ensure that interface data updates are captured within the relevant systems to support wider business processes for in scope services in line with the BSC obligations brought about by MHHS?	For Question 5.3.2.1 A – Your response should include the following: <ul style="list-style-type: none"> <li>Processes for validating UTC Period Level Consumption Data for a given submission, as well as any estimates.</li> </ul>	MHHS-BR-DS-073 MHHS-BR-DS-082 MHHS-BR-DS-084 MHHS-BR-DS-087 MHHS-BR-DS-089 MHHS-BR-DS-092 MHHS-BR-DS-109	
	b) Please outline how you have integrated the Smart Validation & Estimation Method Statement into your local working procedures. This should look to cover estimation for missing and/or invalid periods or re-estimating consumption.	For Question 5.3.2.1 B&C – Your response should include the following: <ul style="list-style-type: none"> <li>Processes for estimating consumption for any missing/invalid periods, as well processes to re-estimate consumption for any estimated UTC periods where further data becomes available to support a more accurate estimate to be submitted</li> </ul>		
	c) Please outline how the most appropriate method is selected from the SDS method statement.	<ul style="list-style-type: none"> <li>The process for storing valid register reads for use in the estimation process where no better data is available.</li> </ul>		

	d) When a new load shape is available how will you reprocess the previously submitted data?	For Question 5.3.2.1 D – Your response should include the following: <ul style="list-style-type: none"> <li>As outlined in the Smart V&amp;E method statement &amp; Estimation Method, please describe your process for handling Load Shape Data, including how you receive this information and the procedures you follow to reprocess previously submitted data</li> </ul>		
	e) How do you ensure that your obtained cumulative reads via the DIP are stored and used in the estimation process?	For Question 5.3.2.1 E – Your response should include the following: <ul style="list-style-type: none"> <li>Processes and/or controls of previously obtained actual readings used to estimate reads.</li> </ul>		
<b>5.3.2.2 Customer Direct Contract</b>	a) What controls do you have in-place to ensure that interface data updates are captured within the relevant systems to support wider business processes for in scope services in line with the BSC and REC obligations brought about by MHHS?	For Question 5.3.2.2 A – Your response should include the following: <ul style="list-style-type: none"> <li>Controls in place to ensure that any appointments and updates to Customer Direct Contracts are reflected in the Registration Services.</li> <li>Controls in place to identify when Customer Direct Contracts need to be removed, and how you will ensure these are published in a timely manner.</li> </ul>	MHHS-BR-DS-031 MHHS-BR-DS-032 MHHS-BR-DS-033 MHHS-BR-DS-034 MHHS-BR-DS-035 MHHS-BR-DS-036 MHHS-BR-DS-037	

## 5.4 Unmetered Supplies Data Service (UMSDS)

Note: Prior to seeking Qualification as a UMSDS your Equivalent Meter needs to be approved via various committees, as outlined in BSCP700.

The Unmetered Supplies Data Service must be Qualified to operate as a Data Service in line with the BSC Qualification Process.

### 5.4.1 Business Processes

Business Process Area	Questions	Guidance Points	MHHS requirements	Participant Responses
<p>5.4.1.1 <b>Appointments and/or De-Appointments</b></p> <p>In line with MHHS- BP002</p>	<p>a) Aside from the functional elements tested in PIT/SIT/QT, what developments have been made to your E2E business processes? (e.g. inputs, workflows, integrations, and downstream systems and processes)</p>	<p>For Question 5.4.1.1 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>A disclosure of developments made to systems and processes which have not been tested as part of PIT/SIT/QT. This could be because, for example, you have made changes to upstream, downstream, and/or interfacing systems which have not been captured within the scope of the functional test scenarios and scripts but will form part of the wider business process requirements as defined in the BSC Codes.</li> </ul>	<p>MHHS-BR-DS-002 MHHS-BR-DS-017</p>	



		<ul style="list-style-type: none"> <li>• Additionally, this may be because you are placing reliance on testing completed by other MHHS Participants for common systems, but the integration with your own end-to-end solution has not yet been tested.</li> <li>• Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information.</li> </ul>		
	b) How have these E2E business processes been tested (e.g., testing within your own UIT environment)?	<p>For Question 5.4.1.1 B - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• How will you gain assurance that even with these developments, your wider end-to-end systems and processes will still enable you to operate in line with your BSC Code Requirements. For example, will you perform further testing in your own UIT environment, and if so, what will be the scope of this testing and who will be involved.</li> </ul>		
	c) How do you receive the notification from the Registration Service and any supporting information confirming the UMSO appointment?	<p>For Question 5.4.1.1 C – Your response should address the following:</p> <ul style="list-style-type: none"> <li>• The process and/or systems used to receive a new UMSO appointment and MPAN details from the Registration Service, and how these records are maintained within your system</li> </ul>		
	d) How do you obtain the information on submeters, location, latitude/longitude and Photoelectric Control Unit (PECU) Array details?	<p>For Question 5.4.1.1 D – Your response should address the following:</p> <ul style="list-style-type: none"> <li>• The agreed delivery method of MPAN details from the UMSO</li> </ul>		
5.4.1.2 Data Collection	a) Aside from the functional elements tested in PIT/SIT/QT, what	For Question 5.4.1.2 A - Your response should include the following:	MHHS-BR-DS-061 MHHS-BR-DS-062	

	<p>developments have been made to your E2E business processes? (e.g. inputs, workflows, integrations, and downstream systems and processes)</p>	<ul style="list-style-type: none"> <li>• A disclosure of developments made to systems and processes which have not been tested as part of PIT/SIT/QT. This could be because, for example, you have made changes to upstream, downstream, and/or interfacing systems which have not been captured within the scope of the functional test scenarios and scripts but will form part of the wider business process requirements as defined in the BSC Codes.</li> <li>• Additionally, this may be because you are placing reliance on testing completed by other MHHS Participants for common systems, but the integration with your own end-to-end solution has not yet been tested.</li> <li>• Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information.</li> </ul>	<p>MHHS-BR-DS-063  MHHS-BR-DS-064  MHHS-BR-DS-065  MHHS-BR-DS-066  MHHS-BR-DS-067  MHHS-BR-DS-068  MHHS-BR-DS-069  MHHS-BR-DS-071</p>	
	<p>b) How have these E2E business processes been tested (e.g., testing within your own UIT environment)?</p>	<p>For Question 5.4.1.2 B - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• How will you gain assurance that even with these developments, your wider end-to-end systems and processes will still enable you to operate in line with your BSC Code Requirements. For example, will you perform further testing in your own UIT environment, and if so, what will be the scope of this testing and who will be involved.</li> </ul>		
	<p>c) How do you receive and validate D0388 unmetered supplies inventory from the UMSO?</p>	<p>For Question 5.4.1.2 C – Your response should address the following:</p> <ul style="list-style-type: none"> <li>• The agreed method for receiving and validating D0388 flows from the UMSO</li> </ul>		

	d) How do you send the D0389 UMS response following validation?	For Question 5.4.1.2 D – Your response should address the following: <ul style="list-style-type: none"> <li>The sending of the D0389 response flow following rejection, outlining whether each MPAN is accepted or rejected, and where rejected, the reason for rejection</li> </ul>		
	e) Upon being appointed how do you obtain and manage the provision of the PECU Arrays data and support delivery of consumption data?	For Question 5.4.1.2 E – Your response should address the following: <ul style="list-style-type: none"> <li>The method for receiving and maintaining the provision of PECU arrays in line with the UMSDS Method Statement</li> </ul>		
	f) Upon being appointed how do you obtain details of the Central Management System (CMS) from the customer, UMISO or CMS provider?	For Question 5.4.1.2 F – Your response should address the following: <ul style="list-style-type: none"> <li>How you will retrieve details of the Central Management System from the customer, UMISO and/or CMS provider (including whether this process differs between providers) and schedule contact to support delivery of UTC Period Level Consumption Data</li> </ul>		
	g) How do you obtain the switching times and load information from the CMS?	For Question 5.4.1.2 G – Your response should address the following: <ul style="list-style-type: none"> <li>Your chosen method for obtaining and validating switching times and load information from CMS</li> </ul>		
5.4.1.3 Identifying Faults	a) Aside from the functional elements tested in PIT/SIT/QT, what developments have been made to your E2E business processes? (e.g. inputs, workflows, integrations, and downstream systems and processes)	For Question 5.4.1.3 A - Your response should include the following: <ul style="list-style-type: none"> <li>A disclosure of developments made to systems and processes which have not been tested as part of PIT/SIT/QT. This could be because, for example, you have made changes to upstream, downstream,</li> </ul>	MHHS-BR-DS-080 MHHS-BR-DS-147.2	

		<p>and/or interfacing systems which have not been captured within the scope of the functional test scenarios and scripts but will form part of the wider business process requirements as defined in the BSC Codes.</p> <ul style="list-style-type: none"> <li>• Additionally, this may be because you are placing reliance on testing completed by other MHHS Participants for common systems, but the integration with your own end-to-end solution has not yet been tested.</li> <li>• Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information.</li> </ul>		
	<p>b) How have these E2E business processes been tested (e.g., testing within your own UIT environment)?</p>	<p>For Question 5.4.1.3 B - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• How will you gain assurance that even with these developments, your wider end-to-end systems and processes will still enable you to operate in line with your BSC Code Requirements. For example, will you perform further testing in your own UIT environment, and if so, what will be the scope of this testing and who will be involved.</li> </ul>		
	<p>c) What is the process to receive fault notifications?</p>	<p>For Question 5.4.1.3 C – Your response should address the following:</p> <ul style="list-style-type: none"> <li>• How you will receive notification (either in a system/portal or otherwise e.g. email) when there is a fault with the metering equipment</li> <li>• The UMSDS needs to investigate any faulty metering equipment, identified, or notified to them.</li> </ul>		

	d) What actions do you take to investigate faulty equipment?	<p>For Question 5.4.1.3 D – Your response should address the following:</p> <ul style="list-style-type: none"> <li>• The process for investigating faults in a timely manner once notification has been received</li> <li>• How feedback of faults, (including progress of resolution and any delays encountered) will be provided upon investigation</li> <li>• How faults will be tracked and monitored internally. This may include a fault log or fault report that contains details of any past and present faults.</li> </ul>		
	e) What controls do you have in place to ensure that the requirements of BSCP704 are met for EM Fault Reporting?	<p>For Question 5.4.1.4 E – Your response should address the following:</p> <ul style="list-style-type: none"> <li>• Monitor and manage the receipt of notification of a fault/inconsistency and what action could be required to investigate.</li> </ul>		
5.4.1.4 <b>Operational Requirements</b>	a) What controls do you have in place to ensure that you meet all of your requirements as outlined in the Operational Choreography	<p>For Question 5.4.1.4 A - Your response should include the following:</p> <ul style="list-style-type: none"> <li>• Both preventative controls and detective controls, which could include your monitoring activities and processes for manual intervention. How you will ensure you meet specific processing and response SLAs (these may be referenced in your answers above)</li> <li>• How you will ensure you meet your operational requirements which may not have been tested during functional testing?</li> </ul>	<p>OPC_150  OPC_170A  OPC_170B  OPC_190  OPC_200  OPC_210  OPC_300  OPC_340  OPC_420  OPC_430A  OPC_440  OPC_490 MHHS-BR-DS-040</p>	

5.4.1.5 <b>Migration Requirements</b>	a) What controls do you have in-place to ensure the appointment process is followed for Migration?	For Question 5.4.1.5 A - Your response should include the following: <ul style="list-style-type: none"> <li>Do you have Bi-laterals in place to agree a process for migration outside of market messages?</li> </ul>	MHHS-Migration-UNM-DS-001	
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## 5.4.2 Data Management

Data Management Area	Questions	Guidance Points	MHHS Requirements	Participant Responses
5.4.2.1 <b>Data Processing</b>	a) What controls do you have in-place to ensure that interface data updates are captured within the relevant systems to support wider business processes for in scope services in line with the BSC obligations brought about by MHHS?	For Question 5.4.2.1 A –Your response should address the following: <ul style="list-style-type: none"> <li>When updates are received, what automated and manual processes are in place to update the system in line with business processes.</li> </ul>	MHHS-BR-DS-078 MHHS-BR-DS-081 MHHS-BR-DS-085 MHHS-BR-DS-090	
	b) When a new load shape is available how will you reprocess the previously submitted data?	For Question 5.4.2.1 B –Your response should address the following: <ul style="list-style-type: none"> <li>The process to reprocess previously submitted data following the UMSDS Method Statement when a new load shape is made available.</li> </ul>		
	c) How do you calculate consumption for all UTC periods?	For Question 5.4.2.1 C – Your response should address the following: <ul style="list-style-type: none"> <li>Processes and/or systems used to calculate consumption for all UTC periods, and methods used to check all calculations are complete and accurate.</li> </ul>		

	d) How do you re-calculate consumption when better data becomes available?	<p>For Question 5.4.2.1 D – Your response should address the following:</p> <ul style="list-style-type: none"> <li>• Circumstances in which you may re-calculate consumption data, and how this re-calculation is performed.</li> </ul>		
5.4.2.2 <b>Customer Direct Contract</b>	a) What controls do you have in-place to ensure that interface data updates are captured within the relevant systems to support wider business processes for in scope services in line with the BSC obligations brought about by MHHS?	<p>For Question 5.4.2.2 A – Your response should include the following:</p> <ul style="list-style-type: none"> <li>• Controls in place to ensure that any appointments and updates to Customer Direct Contracts are reflected in the Registration Services.</li> <li>• Controls in place to identify when Customer Direct Contracts need to be removed, and how you will ensure these are published in a timely manner</li> </ul>	<p>MHHS-BR-DS-031  MHHS-BR-DS-032  MHHS-BR-DS-033  MHHS-BR-DS-034  MHHS-BR-DS-035  MHHS-BR-DS-036  MHHS-BR-DS-037</p>	