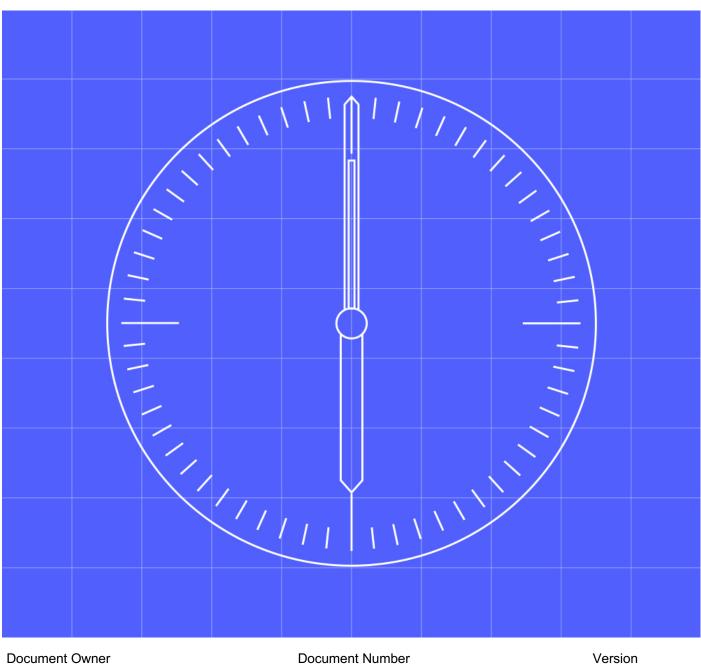
# MHHS Qualification Assessment Document



Document Owner BSC and REC Code Bodies Status Draft Document Number MHHS-DEL2296 Date 07/05/2024 Version 1.1 Classification **Public** 

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# 2. House Keeping

#### 2.1 Change Record

Date	Author	Version	Change Detail
16/02/2024	Elexon and REC Performance Assurance	0.1	Draft version for consultation, covering functional requirements only. This document has not been through the BSC and REC PAB governance process yet, and may require further updates to cover non- functional, migration, and operational requirements. The information provided may change, subject to review.
20/02/2024	Elexon and REC Performance Assurance	1.0	Final version, following updates from industry consultation, to present to BSC and REC PABs for approval.
07/05/2024	Elexon and REC Performance Assurance	1.1	Draft version for consultation, covering role specific guidance points.

#### 2.2 Linked Documents

Name	Link
Qualification Approach and Plan	https://www.mhhsprogramme.co.uk/testing/qualification/qualification-approach-and- plan
MHHS Qualification Glossary	MHHS Qualification Glossary

### 3. Document Instructions

The Qualification Assessment Document (QAD) is the mechanism through which all Programme Participants will provide the evidence required by Code Bodies for MHHS Qualification. Code Bodies expect Programme Participants to complete the QAD 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 <u>Qualification Approach and Plan (QA&P)</u> 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) and Retail Energy Code (REC).

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 via an Initial QAD Submission and a Final QAD Submission. Where test evidence has been uploaded into Microsoft Azure DevOps (ADO), this should be referenced within the QAD, rather than uploading evidence in multiple places.

A Programme Participant must provide the following in its Initial QAD Submission:

- Confirmation of Pre-Integration Testing (PIT) completion (test completion report including defects that cannot be resolved through PIT with supporting work-off plans and agreement with Code Bodies where elements of PIT have been deferred for later completion), which is outlined in section 4.2.2,
- Confirmation that it has service designs/Local Work Instructions (LWIs) covering each relevant process, which is outlined in section 4.2.3,
- Details of operational controls e.g. exception management etc, which is outlined in section 4.3.1, and
- Other organisation specific information requested in the Initial QAD Submission (not reliant on testing).

Code Bodies will then review this information and work with the Programme Participant to clarify and assure that the information provided meets Code Body requirements for MHHS Qualification.

Once the Programme Participant has completed QT/SIT, it must provide its **Final QAD Submission** covering the following:

- Confirmation of QT/SIT completion (test completion report including defects that cannot be resolved through SIT/QT with supporting work-off plans that have been agreed by Code Bodies), which is outlined in section 4.2.4.
- Confirmation that it has completed DIP User requirements e.g. information security responses reviewed and agreed by DIP Manager and any contractual agreements, required between the Programme Participant and the DIP Manager to become a DIP User, have been signed (this includes DIP Connection Providers operating on a Programme Participant's behalf), which is outlined in section 4.5.

All sections must be completed during the initial submission of the QAD, and verified for the final submission of the QAD, unless stated.

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 QAD must be signed by a Company Director (or delegate for roles governed only under REC) 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 - <u>MHHS</u> <u>Qualification Glossary</u>, and further terms relating to qualification are defined in 'Appendix A – Glossary' of the Qualification Approach and Plan.

[Although Code Bodies have provided a Word version of the QAD for this consultation, the format of the QAD submission is likely to change to an electronic version which will be demonstrated at the appropriate Qualification Working Group (QWG) meeting. Please note that Code Bodies will provide further guidance on the evaluation criteria for each section as part of a QAD walkthrough webinar and within the electronic version.]

# 4. Organisation Section

#### 4.1 Company Sign Off

To be completed in final submission of the QAD

#### 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 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 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 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 and REC 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 Testing Declaration and Evidence Submission

Questions	Guidance Points	Participant Response
4.2.1. 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.	[Yes/No/Not Applicable] If yes, please provide an updated Pre-Qualification Submission or Placing Reliance form, highlighting the parts that have changed.	
	If you were not required to submit a pre-qualification submission, then please select N/A.	
4.2.2. Please confirm that for each MHHS requirement, you have successfully completed the relevant testing requirements in Pre-Integration Testing (PIT) to satisfy the BSC and/or REC Assessment Criteria, have provided PIT documentation including an approved MHHS-DEL1052 PIT Test Completion Report, and	[Yes/No] 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.	
where applicable, agreed a work-off plan with the REC and BSC Code Managers for any outstanding defects.	If you have agreed a work-off plan, please provide an update here of the latest status of agreed actions.	
	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.	
4.2.3. Please confirm that all relevant process	[Yes/No]	
documentation, including Local Work Instructions (LWIs) for operatives have been updated for all business processes required to meet the BSC and REC MHHS assessment criteria.	If no, please detail expected timeframes to complete these updates; these should be completed by the final submission of the QAD.	
	These updates should cover all of the relevant 'Business Processes' to your role(s) from Section 5 of the QAD.	
To be completed in final submission of the QAD	[Yes/No]	
4.2.4. Please confirm that for each testable MHHS requirement, you (and/or your third party software	If no, please detail which requirements you have not successfully completed testing for, and any mitigation	

provider) have successfully completed the relevant testing requirements in SIT or QT, and where applicable, agreed a work-off plan with the REC and	or alternative evidence you have agreed with the relevant Code Bodies.	
BSC Code Managers for any outstanding defects.	If you have an agreed work-off plan, please provide an update here of the latest status of agreed actions.	

#### 4.3 **Operational Readiness**

Questions	Guidance Points	Participant Response
4.3.1 Please provide details on your user readiness plan to ensure that operatives will be able to perform the updated processes during live operations.	This should include plans for additional training, guidance documentation, user testing, dress rehearsals, and post go-live monitoring. For the initial submission of the QAD you should outline timeframes for planning, creating, and executing these activities, and in the final submission of the QAD you should outline the latest status of these activities. You may wish to provide a written summary of these planned activities, and/or upload relevant support documentation outlining this.	
4.3.2 What adjustments, if any, are required in your organisation's resource needs to meet the changes brought about 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.	
	For the initial submission of the QAD you should outline the expected timeframes for planning, creating, and executing a resourcing plan, and in the final submission of the QAD you should provide an update on the specific resourcing plan.	
	You may wish to provide a written summary of these planned activities, and/or upload relevant support documentation outlining this.	
4.3.3. How will you ensure that the cutover to the changed processes does not cause disruption to	If an issue does arise during the cutover when you begin migrating, how will you ensure that it does not produce a failure to meet the BSC and/or REC	

prevent you from meeting your obligations as set out in the BSC and/or REC (as appropriate)?	obligations? You should detail any rollback plans and how dual running of pre-MHHS and post-MHHS systems may relieve specific risks.	
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#### 4.4 Information Security and Data Protection

Questions	Guidance Points	Participants Response
4.4.1. How will you ensure that you have comprehensively identified and effectively assessed all information security and data protection risks associated with your in-scope services that were updated in line with the BSC and REC obligations brought about by MHHS?	<ul> <li>Provide an impact assessment or risk register detailing security and data risk associated with the changes brought about by MHHS, including risk scoring, owners, applicable controls and mitigating actions.</li> <li>Where applicable, provide risk treatment plans detailing the response to any risk associated with MHHS requirements and code obligations.</li> </ul>	

#### 4.5 Data Integration Platform (DIP)

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

[Please note that Issue 101 'Ongoing Governance, Funding and Operation of the DIP' is currently being consulted on and this section will be updated as required to reflect the outcome of this consultation.]<sup>1</sup>

Questions	Participants Response
4.5.1. Do you comply with ISO 27000 series? ( <i>note: or equivalent provision</i> )	
4.5.2. 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, within	

<sup>&</sup>lt;sup>1</sup> https://www.elexon.co.uk/documents/change/issues/101-150/issue-101-issue-consultation/

legal constraints, for a minimum of 3 months of live	
data and 12 months archived	
4.5.3. Provide an overview of your process in place to	
retain any security events for all information systems	
that interact with the DIP.	
4.5.4. Provide evidence of logical network schematic	
of the information systems and services in scope that	
interact with the DIP, and include:	
a) services and functionality;	
b) gateway/boundaries functionality	
4.5.5. 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;	
4.5.6. Provide an overview of your process in place	
for Key Management.	
As the question is in relation to the DIP, then the 'keys'	
in question are the DIP keys i.e. those keys used to	
establish APIs and Webhooks between he DIP and	
the DIP User's systems	
4.5.7. Provide an overview of processes, protocols,	
and liabilities between the DIP User and any third	
Party you have contracted with are in place.	
4.5.8. Do systems using the DIP have the ability to	
store messages for at least two years?	
4.5.9. Please provide details of the following	
documents and processes that you have in place to	
ensure your compliance with data protection	
legislation:	
<ul><li>a. Relevant data protection policies,</li><li>b. Relevant data protection processes, and</li></ul>	
<ul> <li>b. Relevant data protection processes, and</li> <li>c. Where applicable, data protection impact</li> </ul>	
assessments.	

4.5.10. Provide an overview of your contingency plan in place for data breaches, security events, and other emergencies in relation to DIP data, demonstrated by the production of written documents.	
4.5.11. How are DIP Users made aware of their responsibilities as a Data Processor in accordance with relevant Legislation?	
4.5.12. Can you confirm your adherence to the Authority's Data Best Practice?	
4.5.13. Have you signed the Access Agreement with the DIP Manager to start DIP onboarding?	

#### 4.6 Interface Management

Data Management Area	Questions	MHHS requirements	Participant Responses
4.6.1 Data Integration	a) What controls and procedures do you	MHHS-BR-SU-122	
Platform (DIP)	have in place around Market Message	MHHS-BR-SU-123.1	
	management to ensure they are robust and appropriate to meet the BSC and REC obligations brought about by	MHHS-BR-SU-123.2	
		MHHS-BR-SU-124	
		MHHS-BR-SU-126	
	MHHS that are relevant to your role(s)?	MHHS-BR-SU-127	
	(e.g. - Error resolution	MHHS-BR-SU-128	
	- Monitoring of missing or erroneous	MHHS-BR-SU-129	
	DIP interfaces	MHHS-BR-SU-140	
	- Data backups and recovery	MHHS-BR-LD-058	
	processes)	MHHS-BR-LD-059.1	
	This may include controls in systems directly to the DIP, or middleware such as the DIP adapter. You may wish to provide a written summary of these processes and controls, and/or upload relevant support documentation outlining these.	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	

4.6.2 Data Transfer	a) How is your connection to the DTN	MHHS-BR-SU-138
Network (DTN)	maintained to send and receive flows?	MHHS-BR-RS-143
		MHHS-BR-MS-083
	<ul> <li>b) What systems do you use to send DTN flows and what automation steps do</li> </ul>	MHHS-BR-DS-149
	you have in place?	
	c) What are your validation steps for DTN	
	flows received via the DTN?	
	d) How are details updated and	
	maintained onto your system?	
	e) How have you adapted your systems	
	and processes regarding DTN flows to reflect the new MEM and Data Services	
	Market Roles?	
	f) How have you tested the DTN flows	
	and to what extent?	
4.6.3 Industry Standing	a) What controls do you have in-place to	MHHS-BR-SU-123
Data (ISD)	ensure that ISD updates are captured	MHHS-BR-LD-059
	within all relevant systems to support wider business processes?	MHHS-BR-MS-071
		MHHS-BR-DS-139

4.6.4 Electricity Enquiry Services (EES)	<ul> <li>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?</li> </ul>	MHHS-BR-SU-139 MHHS-BR-DS-156 MHHS-BR-MS-090 MHHS-BR-DS-156		
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## 5. Role-Specific Sections

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

#### 5.1 Supplier

#### **Business Processes**

Process Area	Questions	Guidance Points	MHHS requirements	Participant Responses
5.1.1.1 Initial Registrations, including New Connections In line with MHHSP- BP001, MHHSP- BP002, MHHSP- BP003	a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g.	<ul> <li>For Question 5.1.1.1 A - Your response should include the following:</li> <li>A disclosure of changes 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</li> </ul>	MHHS-BR-SU-001 MHHS-BR-SU-004 MHHS-BR-SU-048 MHHS-BR-SU-048.1 MHHS-BR-SU-049	

E2E process changes tested in own UIT environment)	scripts but will form part of the wider business process
<ul> <li>b) 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.</li> <li>c) In cases where you raise an "MPAN Request" in SDEP requesting the DNO to establish a new metering point, how will you ensure that you capture all of the information required for that request??</li> </ul>	<ul> <li>requirements as defined in the BSC and REC Codes. 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>
	<ul> <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 operate in line with your BSC and REC 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> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> </ul>
	For Question 5.1.1.1 B - Your response should include the following points;

		<ul> <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> <li>For Question 5.1.1.1 C - Your response should include the following point;</li> <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>		
with Change of Supplier In line with MHHSP- BP002, MHHSP- BP003	<ul> <li>a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? (<i>e.g. to inputs, workflows, integrations, and downstream systems and processes; this may be nothing</i>). In the case that changes have been made, how have you tested these updated E2E business process (<i>e.g. E2E process changes tested in own UIT environment</i>)</li> <li>b) What controls do you have in place to verify that a Qualified Data Service and/or Metering</li> </ul>	<ul> <li>For Question 5.1.1.2 A - Your response should include the following:</li> <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</li> </ul>	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 MHHS-BR-SU-013 MHHS-BR-SU-015 MHHS-BR-SU-015 MHHS-BR-SU-017 MHHS-BR-SU-059 MHHS-BR-SU-106 MHHS-BR-SU-107 MHHS-BR-SU-135	

	Service is appointed for the	enable you to operate in line with	MHHS-BR-SU-136	
	relevant Market Segment from	your BSC and REC Code	MHHS-BR-SU-136 MHHS-BR-SU-158	
	-			
	the Registration Effective From	Requirements, as above.	MHHS-BR-SU-159	
	Date (EFD)?		MHHS-BR-SU-160	
		If there are no relevant additional		
	What controls will you put in	changes to disclose for this		
	place to manage Supplier Agent	business process, please write		
	activities to ensure the end-to-	"N/A".		
	end process is carried out within			
	MHHS defined timescales. This	For Question 5.1.1.2 B - Your response		
	includes:	should include the following:		
	a. Data Services activities	should moldde the following.		
	e.g. sending			
	Consumption data	<ul> <li>Method(s) to identify and appoint a</li> </ul>		
	b. MEM activities e.g.	Qualified Data Service and/or		
	sending MTDs	Metering Service to the relevant Market Segment, and ongoing		
	5	monitoring controls to ensure the		
(b	How will you identify when you	correct appointment is in place.		
	need to raise a dispute to switch	correct appointment is in place.		
	meter reads given the			
	amendments to the triggers for	For Question 5.1.1.2 C - Your response		
	raising a dispute, the extension	should include the following:		
	of the application to cover half			
	hourly metering point?	Controls to ensure Supplier Agent		
	nourly metering point:	Activities are carried out in line with		
2)	What controls do you have in	MHHS defined timescales and		
	place to ensure the end-to-end	messages are processed within 60		
	process is carried out within	minutes of receipt, outlined in the		
	MHHS defined timescales as	operational choreography. Controls		
	outlined in the Operational	may include ongoing monitoring		
	Choreography and baselined in	processes and follow-up		
	the relevant codes?	communication where activities are		
		delayed. Please refer to both:		
f)	How will you identify	<ul> <li>Data Service activities</li> </ul>		
	discrepancies between	<ul> <li>MEM activities</li> </ul>		
	metering details received from			
	SMRS with information from the	For Question 5.1.1.2 D - Your response		
	Metering Service?	should include the following:		
		<ul> <li>Methods to identify raising a</li> </ul>		
	-	<ul> <li>Methods to identify raising a dispute to switch meter reads.</li> </ul>		

<ul> <li>For Question 5.1.1.2 E - Your response should include the following:</li> <li>Controls to ensure a dispute is identified, raised and resolved as early as possible.</li> </ul>	
For Question 5.1.1.2 F - Your response should include the following:	
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	

5.1.1.3 Appointment without Change of Supplier In line with MHHSP- BP002, MHHSP- BP003	a) b)	Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? ( <i>e.g. to inputs,</i> <i>workflows, integrations, and</i> <i>downstream systems and</i> <i>processes; this may be</i> <i>nothing</i> ). In the case that changes have been made, how have you tested these updated E2E business process ( <i>e.g.</i> <i>E2E process changes tested in</i> <i>own UIT environment</i> ) Please note where controls are different to those in Q5.1.1.2.	<ul> <li>For Question 5.1.1.3 A - Your response should include the following:</li> <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 operate in line with your BSC and REC Code Requirements, as above.</li> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> <li>For Question 5.1.1.3 B - Your response should include any additional controls you have in place to manage appointments that were not outlined in Q5.1.1.2.</li> </ul>	See Q2	
5.1.1.4 Change of Market Segment In line with MHHSP- BP011	a)	Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to the E2E business process? ( <i>e.g. to inputs</i> ,	<ul> <li>For Question 5.1.1.4 A - Your response should include the following:</li> <li>A disclosure of changes to systems and processes which have not</li> </ul>	MHHS-BR-SU-097 MHHS-BR-SU-098 MHHS-BR-SU-099 MHHS-BR-SU-100	

<ul> <li>workflows, integrations, and downstream systems and processes; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment)</li> <li>b) How will you liaise with the customer, LDSO and Metering Service as appropriate to coordinate the change and agree a target work date?</li> <li>c) What controls do you have in place to ensure that you identify when new service providers are required?</li> </ul>	<ul> <li>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 operate in line with your BSC and REC Code Requirements, as above.</li> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> <li>For Question 5.1.1.4 B - Your response should include the following:</li> <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 liase with the Metering Service/LDSO to provide a prompt update.</li> </ul>	MHHS-BR-SU-101 MHHS-BR-SU-103 MHHS-BR-SU-104 MHHS-BR-SU-105 MHHS-BR-SU-109 MHHS-BR-SU-109	
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		<ul> <li>For Question 5.1.1.4 C - Your response should include the following:</li> <li>Any controls in place to identify when a new service provider is required following a change of Market Segment</li> </ul>		
5.1.1.5 Identifying Faults	<ul> <li>a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment)</li> <li>b) How are you notified of any faults?</li> <li>c) Where applicable how do you notify the UMSDS of any faults?</li> </ul>	<ul> <li>For Question 5.1.1.5 A - Your response should include the following:</li> <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 operate in line with your BSC and REC Code Requirements, as above.</li> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> </ul>	MHHS-BR-SU-132 MHHS-BR-SU-133 MHHS-BR-SU-134	

5446		<ul> <li>For Question 5.1.1.5 B - Your response should include the following:</li> <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> <li>For Question 5.1.1.5 C - Your response should include the following:</li> <li>Your chosen method(s) to notify the UMSDS of any faults.</li> </ul>		
5.1.1.6 <b>Disconnections</b> In line with MHHSP- BP007	<ul> <li>a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment)</li> <li>b) What systems and processes do you have in place to ensure that when confirmation of</li> </ul>	<ul> <li>For Question 5.1.1.6 A - Your response should include the following:</li> <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</li> </ul>	MHHS-BR-SU-051 MHHS-BR-SU-054 MHHS-BR-SU-055 MHHS-BR-SU-056	
	that when confirmation of disconnection of a Meter Point Administration Number (MPAN) is received that records are maintained accordingly?	<ul> <li>systems and processes will still enable you to operate in line with your BSC and REC Code Requirements, as above.</li> <li>If there are no relevant additional changes to disclose for this</li> </ul>		

c)	What controls do you have in place to ensure the disconnection is correct before continuing?	business process, please write "N/A".	
d)	How will you raise any issues if you do carry out the disconnection erroneously?	For Question 5.1.1.6 B - Your response should include the following:	
		<ul> <li>Processes in place to receive notifications of disconnected MPANs and how records of disconnections will be stored and maintained.</li> </ul>	
	-	For Question 5.1.1.6 C - Your response should include the following:	
		• 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.	
		For Question 5.1.1.6 D - Your response should include the following:	
		<ul> <li>The chosen method(s) to raise any issues identified following completion of an erroneous disconnection to amend or reverse the disconnection.</li> </ul>	

5.1.1.7 Change of Energisation Status	a) Excluding the functional elements tested in PIT/SIT/QT	For Question 5.1.1.7 A - Your response should include the following:	MHHS-BR-SU-053	
Energisation Status	<ul> <li>elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment)</li> <li>b) 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?</li> </ul>	<ul> <li>should include the following:</li> <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 operate in line with your BSC and REC Code Requirements, as above.</li> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> <li>For Question 5.1.1.7 B - Your response should include the following:</li> <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>	MHHS-BR-SU-060 MHHS-BR-SU-062 MHHS-BR-SU-063 MHHS-BR-SU-064 MHHS-BR-SU-065	
5.1.1.8 Unmetered Supply ( <b>UMS)</b> Exemption	If you wish to apply for the exemptions for UMS please fill in	For Question 5.1.1.8 A - Your response should include the following:		

	the below and provide evidence are		
(If applicable)	the below and provide evidence on how your controls work in practice:	<ul> <li>When appointing sites, any controls in place to ensure you are Qualified to be appointed.</li> </ul>	
	a) What controls do you have		
	in place to ensure you will	For Question 5.1.1.8 B - Your response	
	not register any UMS sites?	should include the following:	
	b) What controls do you have	Controls to ensure UMS sites are	
	in place to ensure you do	only migrated into MHHS if the site	
	not migrate a UMS site into	is not an existing registration.	
	MHHS if it is an existing		
	registration?	For Question 5.1.1.8 C - Your response	
	a) What controls do you have	should include the following:	
	<ul> <li>c) What controls do you have in place to identify where</li> </ul>	Processes to identify where UMS	
	you have appointed a UMS	sites have been appointed and	
	site and how you will de-	what is your process to de-appoint	
	appoint this site?	these.	
	d) If you are currently a	For Question 5.1.1.8 D - Your response	
	Supplier that has UMS	should include:	
	Sites, please provide your	should moldade.	
	clear and detailed plan on	The plan should be clear and	
	how you intend to de-	detailed explaining how you intend	
	register these sites and to provide evidence of it?	to de-register the sites that you are	
	provide evidence of it?	currently appointed to.	
	e) Please also confirm that		
	you understand that	Failure to provide this will impact your	
	appointing UMS sites	exemption.	
	without being qualified		
	could potentially result in re- qualification.	For Question 5.1.1.8 E - Your response	
	quamoutori.	should include the following:	
		A statement of confirmation of the	
		understanding that appointing UMS	
		sites without the appropriate	
		qualification could potentially result	
		in a re-Qualification.	

5.1.1.9 Migration	a)	What controls do you have	For Question 5.1.1.9 A - Your response	MHHS-Migration-CoS-	
Requirements	,	in-place to ensure you meet	should include the following:	SUP-001	
		the specific registration and	a) What controls will you have in place	MHHS-Migration-CoS-	
		appointment requirements	when you are the incoming Supplier to	SUP-002	
		during a migration?	differentiate whether an MPAN is	MHHS-Migration-CoS-	
			legacy, and if so how will you decide	SUP-003	
			whether to migrate the MPAN?	MHHS-Migration-	
				CoA(MS)-SUP-004	
			Additionally, how will you ensure the	MHHS-Migration-	
			effective from date for CoA	CoA(MS)-SUP-005	
			appointments is at least 1 day in	MHHS-RMigration-	
			the future from the transmission date of	CoS-SUP-001	
			the IF-031.	MHHS-RMigration-	
				CoS-SUP-002	
			Furthermore, how will you ensure you	MHHS-RMigration-	
			do not have open IF-031's which are	CoA(MS)-SUP-003	
			left unresponded to by Agents beyond	MHHS-RMigration-	
			appointment effective	CoA(MS)-SUP-004	
			from dates.	MHHS-Migration-Can-	
				SUP-002	
			Finally, what controls do you have in	MHHS-Migration-Mis-	
			place to ensure you will not attempt to	SUP-001	
			change the Market Segment of an	MHHS-Migration-Mis-	
			MPAN as part of the Migration.	SUP-002	
				MHHS-Migration-Mis-	
				SUP-003	

#### Data Management

Data Management	Questions	Guidance Points	MHHS requirements	Participant Responses
Area				
5.1.2.1 Amendment of Existing Appointment Conditions	<ul> <li>a) What controls do you have inplace 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?</li> <li>b) How will you identify when an appointment amendment is required?</li> <li>c) What controls do you have in place to monitor and review rejected appointment amendment amendments, and where appropriate to resubmit with the required information?</li> </ul>	<ul> <li>For Question 5.1.2.1 A - Your response should include the following:</li> <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> <li>For Question 5.1.2.1 B - Your response should include the following:</li> <li>Processes to determine when an existing Service Provider appointment requires an amendment.</li> <li>For Question 5.1.2.1 C - Your response should include the following:</li> <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 required,</li> </ul>	MHHS-BR-SU-031 MHHS-BR-SU-032 MHHS-BR-SU-033 MHHS-BR-SU-035 MHHS-BR-SU-036	

		how you will re-issue the request.		
5.1.2.2 Consumption Amendment	<ul> <li>a) What controls do you have inplace 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?</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>For Question 5.1.2.2 A - Your response should include the following:</li> <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> <li>For Question 5.1.2.2 B - Your response should include the following:</li> <li>Processes to determine when an override read is required. Please refer to how you will ensure consumption is only amended pre-RF.</li> <li>For Question 5.1.2.2 C - Your response should include the following:</li> <li>Processes to determine where a dispute needs to be raised if a consumption amendment is required post-RF. Your response should include the following:</li> <li>Processes to determine where a dispute needs to be raised if a consumption Amendment is over the minimum materiality criteria for any pre-RF amendments.</li> </ul>	MHHS-BR-SU-111 MHHS-BR-SU-112 MHHS-BR-SU-116 MHHS-BR-SU-117	

5.1.2.3 Customer Direct Contracts	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?	<ul> <li>For Question 5.1.2.3 A - Your response should include the following:</li> <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	
5.1.2.4 Registration Data	<ul> <li>a) What controls do you have inplace to ensure that updates are captured within all relevant systems to support wider business processes? (<i>this is relevant to:</i></li> <li>Supplier-owned registration data such as IHD, SMSO, and Profile Class/SSC</li> <li>Non-supplier owned registration data such as Meter Point Locatio (MPL) address, GSP Group ID, Energy Direction, Metered Status, DUoS Tariff ID</li> </ul>	response.	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-080         MHHS-BR-SU-080         MHHS-BR-SU-080         MHHS-BR-SU-080         MHHS-BR-SU-085         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	

<ul> <li>5.12.5 Related</li> <li>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?</li> <li>b) How will you identify related MPANs, are well as identify any controls in place to ensure that the appointment requests are only initiated by the Primary Metering Points busines updated accordingly?</li> <li>c) What controls do you have in place to ensure that the appointment requests are only more sense to identify related by the Primary Metering Points is updated accordingly?</li> <li>e) For Question 5.1.2.5 B - Your response should include the following:</li> <li>for Question 5.1.2.5 B - Your response should include the following:</li> <li>for Question 5.1.2.5 B - Your response should include the following:</li> <li>for Question 5.1.2.5 B - Your response should include the following:</li> <li>for Question 5.1.2.5 B - Your response should include the following:</li> <li>for Question 5.1.2.5 C - Your response should include the following:</li> <li>for Question 5.1.2.5 C - Your response should include the following:</li> <li>for Question 5.1.2.5 C - Your response should include the following:</li> <li>for Question 5.1.2.5 C - Your response should include the following:</li> <li>for Question 5.1.2.5 C - Your response should include the following:</li> <li>for Question 5.1.2.5 C - Your response should include the following:</li> <li>for Question 5.1.2.5 C - Your response should include the following:</li> <li>for Question 5.1.2.5 C - Your response should include the following:</li> <li>for Question 5.1.2.5 C - Your response should include the following:</li> </ul>			MHHS-BR-SU-096.2 MHHS-BR-SU-096.3	
updated accurately and	<ul> <li>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?</li> <li>b) How will you identify related MPANs, as well as identify any changes required to the Metering Point Relationships in the Registration Services?</li> <li>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</li> </ul>	<ul> <li>response should include the following:</li> <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> <li>For Question 5.1.2.5 B - Your response should include the following:</li> <li>Processes to identify related MPANs, including processes to determine where changes are required to the Metering Point Relationships in the Registration Services.</li> <li>For Question 5.1.2.5 C - Your response should include the following:</li> <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</li> </ul>	MHHS-BR-SU-081 MHHS-BR-SU-083	

5.1.2.6 Import/Export MPANs	a) b)	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?	<ul> <li>For Question 5.1.2.6 A - Your response should include the following:</li> <li>How you will obtain Import/Export linkage updates and maintain records accordingly in all relevant systems.</li> <li>For Question 5.1.2.6 B - Your response should include the following:</li> <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>	MHHS-BR-SU-094 MHHS-BR-SU-096	
5.1.2.7 Meter Technical Details (MTDs)	a) b)	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? How will you identify discrepancies between metering details received from Supplier Meter Registration Service (SMRS) with information from the Metering Service?	<ul> <li>For Question 5.1.2.7 A - Your response should include the following:</li> <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> <li>For Question 5.1.2.7 B - Your response should include the following:</li> <li>Processes to identify any discrepancies between</li> </ul>	MHHS-BR-SU-050 MHHS-BR-SU-052 MHHS-BR-SU-066 MHHS-BR-SU-067 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	

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.	
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#### 5.2 Licensed Distribution System Operator (LDSO)

#### **Business Processes**

Business Process Area	Questions	Guidance Points	MHHS requirements	Participant Responses
5.2.1.1 MEM and/or Data Services Appointments. In line with MHHSP-BP002, MHHSP-BP003	<ul> <li>a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes, even where DIP optionality has been exercised; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment)</li> <li>b) How will you identify and investigate any discrepancies between notification appointments via the DIP and data received from the Metering Service via the DTN?</li> </ul>	<ul> <li>For Question 5.2.1.1 A - Your response should include the following:</li> <li>A disclosure of changes 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 and REC Codes. 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> <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 operate in line with your BSC and REC 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>	MHHS-BR-LD-002 MHHS-BR-LD-003	

		<ul> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> <li>For Question 5.2.1.1 B - Your response should include the following:</li> <li>Methods (manual or automated) to identify any discrepancies between appointments notified by the DIP and data received from the Metering Service via the DTN</li> <li>How discrepancies will be investigated, flagged to the appropriate parties, and the process taken to subsequently resolve</li> </ul>		
5.2.1.2 Change of Connection Type In line with MHHSP- BP011B	<ul> <li>a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes, even where DIP optionality has been exercised; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment)</li> <li>b) What processes and controls do you have in place to ensure</li> </ul>	<ul> <li>For Question 5.2.1.2 A - Your response should include the following:</li> <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 operate in line with your BSC and REC Code Requirements, as above.</li> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> </ul>	MHHS-BR-LD-047 MHHS-BR-LD-048 MHHS-BR-LD-050 MHHS-BR-LD-051	

5.2.1.3 Disconnections	<ul> <li>you meet the new operational choreography required for the change of connection type, i.e. registration services updated within 2 working days after completion of the work, and that this process is coordinated with the MEM?</li> <li>c) How will you agree a target date with the Supplier and ensure you complete the work on the agreed target date?</li> <li>d) What controls do you have in place to identify when an existing connection type is inaccurate and ensure any queries are resolved?</li> <li>a) Excluding the functional</li> </ul>	<ul> <li>For Question 5.2.1.2 B - Your response should include the following:</li> <li>Agreed method(s) of receiving a request from the Registration Service to change the Connection Type and processing that request within 60 minutes of receipt.</li> <li>For Question 5.2.1.2 C - Your response should include the following:</li> <li>Following a request to change the Connection Type, how you will agree a date with the Supplier for completion of work.</li> <li>Processes to action the change of Connection Type, including scheduling works with the MEM and ensuring the works have been completed as and when expected.</li> <li>For Question 5.2.1.2 D - Your response should include the following:</li> <li>Controls to ensure the Registration Service is updated of the Change to Connection Type within 2WDs. Please refer to the IF-043 flow in your response</li> <li>Controls in place to identify any inaccuracies in existing connection types, ensuring relevant parties are informed of the discrepancy and resolving the issue in a timely manner</li> </ul>	MHHS-BR-LD-013
In line with MHHSP-BP007	elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? ( <i>e.g. to inputs, workflows,</i>	<ul> <li>A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above.</li> </ul>	MHHS-BR-LD-015 MHHS-BR-LD-016 MHHS-BR-LD-017 MHHS-BR-LD-018

	<ul> <li>integrations, and downstream systems and processes, even where DIP optionality has been exercised; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment)</li> <li>b) What controls do you have in place to ensure the disconnection is correct before continuing, and to raise any issues if it is carried out erroneously.</li> </ul>	<ul> <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-toend systems and processes will still enable you to operate in line with your BSC and REC Code Requirements, as above.</li> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> <li>For Question 5.2.1.3 B - Your response should include the following:</li> <li>Controls in place to validate a disconnection request from the Supplier, Customer, Registration Service or UMSO and ensure that a disconnection is only carried out</li> </ul>	MHHS-BR-LD-019 MHHS-BR-LD-020 MHHS-BR-LD-020.1	
5.2.1.4 Change of Energisation Status	a) Excluding the functional elements tested in	<ul> <li>Process in place to raise an issue with the relevant agent if a disconnection is incorrectly carried out.</li> <li>For Question 5.2.1.4 A - Your response should include the following:</li> </ul>	MHHS-BR-LD-022	
In line with MHHSP-BP008	PIT/SIT/QT, what further changes have been made to your E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes, even where DIP optionality has been exercised; this may be nothing). In the case that	<ul> <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> </ul>	MHHS-BR-LD-023 MHHS-BR-LD-024 MHHS-BR-LD-025 MHHS-BR-LD-026	

	<ul> <li>changes have been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment)</li> <li>b) Once a change of energisation request has been processed, what controls do you have in place to ensure that accurate meter reads are received from the Metering or Data Service, where appropriate?</li> </ul>	<ul> <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 operate in line with your BSC and REC Code Requirements, as above.</li> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> <li>For Question 5.2.1.4 B - Your response should include the following:</li> <li>Method(s) (automated or manual) to process a change of energisation request. Your response should include processing the IF-008 within 60 minutes.</li> <li>Controls in place to ensure complete and accurate meter readings are received from the Metering or Data Service and processed in a timely manner</li> </ul>	
5.2.1.5 <b>New Connections</b> In line with MHHSP-BP001	a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes, even where DIP optionality has been exercised; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment)	<ul> <li>For Question 5.2.1.5 A - Your response should include the following:</li> <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-toend systems and processes will still enable you to operate in line with your BSC and REC Code Requirements, as above.</li> </ul>	MHHS-BR-LD-010 MHHS-BR-LD-010.1 MHHS-BR-LD-011 MHHS-BR-LD-012

•	If there are no relevant additional changes to disclose for this business process, please write "N/A".	

Data Management	Questions	Guidance Points	MHHS requirements	Participant Responses
Area				
5.2.2.1 Meter Technical Details (MTDs)	<ul> <li>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?</li> </ul>	<ul> <li>For Question 5.2.2.1 A - Your response should include the following:</li> <li>The chosen method(s) (automated or manual) to receive MTDs from the Metering Service</li> <li>How records of MTDs will be held within your system.</li> <li>Controls in place to ensure updates to MTDs are actioned appropriately and updated in your system in a timely manner</li> </ul>	MHHS-BR-LD-012.1 MHHS-BR-LD-027 MHHS-BR-LD-028 MHHS-BR-LD-030 MHHS-BR-LD-031 MHHS-BR-LD-054	
5.2.2.2 Registration Data	<ul> <li>a) What controls do you have inplace to ensure that updates are captured within all relevant systems to support wider business processes? (<i>this is relevant to:</i> <ul> <li><i>MPL Address, GSP Group ID, Metered Status, Domestic Premise Indicator, Energy Direction, Related MPAN, Import/Export Link</i>)</li> </ul> </li> <li>b) What controls do you have in place to maintain Distribution Use of System (DUoS) Tariff IDs in line with their Charging Method Statement.</li> </ul>	<ul> <li>For Question 5.2.2.2 A - Your response should include the following:</li> <li>The chosen method(s) (automated or manual) to receive Registration Data from the Registration Service</li> <li>How records of Registration Data will be held within your system</li> <li>Controls in place to ensure updates to Registration Data are actioned appropriately and updated in your system in a timely manner.</li> <li>For Question 5.2.2.2 B - Your response should include the following:</li> <li>Controls in place to maintain DUoS Tariff IDs in line with their Charging Method Statement e.g., ongoing</li> </ul>	MHHS-BR-LD-033 MHHS-BR-LD-034 MHHS-BR-LD-035 MHHS-BR-LD-036 MHHS-BR-LD-043 MHHS-BR-LD-043.1 MHHS-BR-LD-043.2	

		monitoring. You should also include your processes for flagging and resolving any discrepancies between DUoS Tariff IDs and their corresponding Charging Method Statements		
5.2.2.3 Consumption Data	<ul> <li>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?</li> </ul>	<ul> <li>For Question 5.2.2.3 A Your response should include the following:</li> <li>Process(es) (automated or manual) to obtain and process validated UTC Period Level Consumption Data from the Data Service via the DIP</li> <li>Controls to ensure all updates to Consumption Data are updated completely and accurately within your system.</li> </ul>	MHHS-BR-LD-007 MHHS-BR-LD-008 MHHS-BR-LD-009.1 MHHS-BR-LD-029	

# 5.3 Registration Service

Process Area	Questions	Guidance Points	MHHS Requirement	Participants Response
5.3.1.1 Change of Supplier In line with MHHSP- BP001	a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes, even where DIP optionality has been exercised; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment)	<ul> <li>For Question 5.3.1.1 A - Your response should include the following:</li> <li>A disclosure of changes 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 and REC Codes. 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> <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 operate in line with your BSC and REC Code Requirements. For example, will you</li> </ul>	MHHS-BR-RS-005 MHHS-BR-RS-006 MHHS-BR-RS-007 MHHS-BR-RS-008	

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5.3.1.2 Appointments In line with MHHSP-	a)	elements tested in PIT/SIT/QT, what further changes have been made to your E2E	<ul> <li>For Question 5.3.1.2 A - Your response should include the following:</li> <li>A disclosure of changes to systems and</li> </ul>	MHHS-BR-RS-009 MHHS-BR-RS-010 MHHS-BR-RS-020 MHHS-BR-RS-033.1
BP002		business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes, even where DIP optionality has been exercised;	<ul> <li>Any instances where you have opted</li> </ul>	
		<i>this may be nothing</i> ). In the case that changes have been made, how have you tested these updated E2E business	out of receiving DIP Publications, and how you will ensure you will receive this information.	
	b)	process (e.g. E2E process changes tested in own UIT environment) What controls do you have in	<ul> <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 operate</li> </ul>	
	5)	place to validate appointment requests for a proposed Metering Service and Data Service? (please note if this	<ul><li>in line with your BSC and REC Code Requirements, as above.</li><li>If there are no relevant additional</li></ul>	
		varies for on the day, retro or prospective appointments, as well as for related MPANs and import/export links)	changes to disclose for this business process, please write "N/A". For Question 5.3.1.2 B - Your response	
			should include the following:	
			<ul> <li>Please outline the approach for obtaining and validating Supplier service appointment requests for a proposed metering service. This should include use of the validation rules set out in (MHHS-IF-031).</li> </ul>	
			<ul> <li>How do you determine which path the proposed metering service will processed on once accepted? Explain any how you determine each of the below processes to work.</li> <li>1. "On the day" (Service Appointment start date = processing date AND</li> </ul>	

		<ul> <li>existing supplier = requesting supplier )</li> <li>2. "Retro" (Service Appointment start date = Previous Service Appointment End Date +1 AND Service Appointment start date&lt; processing date AND Existing Supplier = Requesting Supplier</li> <li>3. "Prospective" (All other appointments)</li> <li>How do you ensure that upon a retrospective change of Metering Service appointment you re-publish a Registration service notification of De- appointment on the DIP?</li> </ul>		
5.3.1.3 New Connections In line with MHHSP- BP001	a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to the E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes, even where DIP optionality has been exercised; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment)	<ul> <li>For Question 5.3.1.3 A - Your response should include the following:</li> <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 operate in line with your BSC and REC Code Requirements, as above.</li> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> </ul>	MHHS-BR-RS-089 MHHS-BR-RS-091	

5.3.1.4 Disconnections In line with MHHSP- BP007	<ul> <li>a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes, even where DIP optionality has been exercised; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment)</li> <li>b) What controls do you have in place to ensure the status is set to de-energised and you send a de-energised and you send a de-energised within a timely manner?</li> <li>c) How do you ensure the reason for disconnection as noted in the de-appointment notifications is accurate?</li> </ul>	<ul> <li>For Question 5.3.1.4 A - Your response should include the following:</li> <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 operate in line with your BSC and REC Code Requirements, as above.</li> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> <li>For Question 5.3.1.4 B - Your response should include the following:</li> <li>How do you receive notification of disconnection from the LDSO? (please outline systems and communication methods)</li> </ul>	MHHS-BR-RS-102 MHHS-BR-RS-102.1	
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		Upon receipt of a registration de- activation from CSS you must send the de-appointment notification with a reason of disconnection for any active servers. How do you ensure that you validate the notification and then undertake this request? (please include any automation or any manual intervention required)		
		• Once part b has been completed you must update the status to de-energised and send a de-energised notification for any MPANs where the energisation status is currently energised. How do you ensure this happens? (please include any automation or any manual intervention required). This is in line with the timescales within MHHSP IF-009 and data should made available to other parties by 06:00 the next day (if received prior to 23:00) and by the second working day (if received after 23:00).		
5.3.1.5 Change of	a) Excluding the functional	For Question 5.3.1.5 A - Your response	MHHS-BR-RS-105 MHHS-BR-RS-106	
Energisation Status In line with MHHSP- BP008	elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? ( <i>e.g.</i> to inputs, workflows, integrations, and downstream systems and processes, even where DIP optionality has been exercised; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business	<ul> <li>should include the following:</li> <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</li> </ul>	иппо-вк-ко-100	

b)	process (e.g. E2E process changes tested in own UIT environment) What controls do you have in place to validate the change of energisation status notifications, and take appropriate action should validation fail?	<ul> <li>wider end-to-end systems and processes will still enable you to operate in line with your BSC and REC Code Requirements, as above.</li> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> </ul>	
		<ul> <li>For Question 5.3.1.5 B - Your response should include the following:</li> <li>How do you ensure that validation of change of energisation status requests are undertaken and processed in 60 minutes as per the timescales in MHHS-IF-007?</li> </ul>	
		<ul> <li>For any validation failures how do you ensure that you reject the energisation status change request, with the failure reason to the Metering Service?</li> <li>For any valid requests how do you ensure that you update the Registration Service system and publish acceptance of the update on the DIP?</li> </ul>	

5.3.1.6 Change of Connection Type/Market Segment In line with MHHSP- BP011B	a) b)	Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? ( <i>e.g.</i> to <i>inputs, workflows, integrations,</i> <i>and downstream systems and</i> <i>processes, even where DIP</i> <i>optionality has been exercised;</i> <i>this may be nothing</i> ). In the case that changes have been made, how have you tested these updated E2E business process ( <i>e.g.</i> E2E process <i>changes tested in own UIT</i> <i>environment</i> ) What controls do you have in place to identify sites which are unmetered, and sites where there is no metering installed, to derive and update a segment type?	<ul> <li>For Question 5.3.1.6 A - Your response should include the following:</li> <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 operate in line with your BSC and REC Code Requirements, as above.</li> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> </ul>	MHHS-BR-RS-123.1 MHHS-BR-RS-124	
5.3.1.7 Meter Data Retriever (MDR) Appointment In line with MHHSP- BP003B	a)	Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes, even where DIP optionality has been exercised; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g. E2E process	<ul> <li>For Question 5.3.1.7 A - Your response should include the following:</li> <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 operate</li> </ul>	MHHS-BR-RS-078 MHHS-BR-RS-078.1 MHHS-BR-RS-078.2 MHHS-BR-RS-079 MHHS-BR-RS-080	

	changes tested in own UIT environment)	<ul> <li>in line with your BSC and REC Code Requirements, as above.</li> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> </ul>	
5.3.1.8 Migration Requirements	<ul> <li>a) What controls do you have in-place to ensure you meet the specific registration requirements during a migration?</li> </ul>	<ul> <li>For Question 5.3.1.8 A - Your response should include the following:</li> <li>What controls will you have in place to ensure once a Forward Migration is initiated (indicated through the send of an IF-031) or if a MPAN is MHHS, the Registration Service will not accept Legacy D flows for a given MPAN.</li> <li>Moreover, what controls will you have in place to ensure that you will remove MPANs from inclusion in the Legacy EES Extract upon successful completion of Forward Migration, indicated through the send of an IF-036.</li> <li>Additionally, as soon as an IF-003 is sent marking the completion of a Reverse Migration, what controls will you have in place to ensure you add those MPANs back into the Legacy EES Extract.</li> <li>Finally, what controls will you have In place to identify for incomplete Migrations and issue an IF-045 where a Supplier has only migrated either the MS or DS.</li> </ul>	MHHS-Migration-CoS- RS-002 MHHS-Migration-CoS- RS-003 MHHS-Migration- CoA(MS)-RS-001 MHHS-Migration- CoA(MS)-RS-002 MHHS-Migration- CoA(MS)-RS-008 MHHS-Migration- CoA(MS)-RS-016 MHHS-Migration- CoA(MS)-RS-019 MHHS-RMigration-CoS- RS-003 MHHS-RMigration-CoS- RS-004 MHHS-RMigration-CoS- RS-005 MHHS-RMigration-CoS- RS-005 MHHS-RMigration-CoS- RS-008 MHHS-RMigration-CoS- RS-008 MHHS-RMigration- CoA(MS)-RS-001

	MHHS-RMigration- CoA(MS)-RS-003
	MHHS-RMigration- CoA(MS)-RS-004
	MHHS-RMigration- CoA(MS)-RS-005
	MHHS-RMigration- CoA(MS)-RS-007
	MHHS-Migration-Can- RS-001
	MHHS-Migration-Can- RS-002
	MHHS-Migration-Can- RS-003
	MHHS-Migration-Can- RS-005
	MHHS-Migration-Mis- RS-002
	MHHS-Migration-Mis- RS-022

Data Management Area	Questions	Guidance Points	MHHS requirements	Participant Responses
5.3.2.1 Registration Data	a) What controls do you have in-place to ensure that updates are captured within all relevant systems and aligned with the LDSO to support wider business processes? ( <i>this is relevant</i> <i>to: MPL Address, GSP</i> <i>Group ID, Metered Status,</i> <i>Domestic Premise</i> <i>Indicator, Energy Direction,</i> <i>Related MPAN,</i> <i>Import/Export links, DUoS</i> <i>Tariffs</i> )	<ul> <li>For Question 5.3.2.1 A - Your response should include the following:</li> <li>The chosen method(s) (automated or manual) to receive Registration Data from the Registration Service</li> <li>How records of Registration Data will be held within your system</li> <li>Controls in place to ensure updates to Registration Data are actioned appropriately and updated in your system in a timely manner.</li> <li>What methods do you use to ensure that all information is aligned with the LDSO?</li> <li>How do you investigate any discrepancies between data held by the Registration Service and the LDSO?</li> </ul>	MHHS-BR-RS-034 MHHS-BR-RS-040 MHHS-BR-RS-043 MHHS-BR-RS-081 MHHS-BR-RS-082 MHHS-BR-RS-083 MHHS-BR-RS-084 MHHS-BR-RS-085 MHHS-BR-RS-086.1 MHHS-BR-RS-086.1 MHHS-BR-RS-088.1 MHHS-BR-RS-088.1 MHHS-BR-RS-088.2 MHHS-BR-RS-088.3 MHHS-BR-RS-088.3 MHHS-BR-RS-088.5	

5.3.2.2 CSS and DCC	a) What controls do you have	For Question 5.3.2.2 A - Your	MHHS-BR-RS-078.1	
Updates	<ul> <li>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?</li> <li>b) What controls do you have in place to identify when an update needs to be sent to CSS/DCC and obtain accurate information to populate the ERDS interface, and maintain a flag against the appointment records with the most recent CSS update outcome?</li> </ul>	<ul> <li>response should include the following:</li> <li>The chosen method(s) (automated or manual) to receive MDR updates from the Central Switching Service</li> <li>How records of MDR appointments will be held within your systems</li> <li>Controls in place to ensure updates to MDR Appointments are updated in your systems in a timely manner</li> <li>What methods do you use to ensure that all information is aligned with the LDSO? How do you investigate any discrepancies between data held by the Registration Service and the LDSO?</li> </ul>	MHHS-BR-RS-078.2 MHHS-BR-RS-079	

	<ul> <li>For Question 5.3.2.2 B - Your response should include the following: <ul> <li>Controls in place to verify whether MDR appointment records in CSS are up to date, or whether an update needs to be sent.</li> <li>What notifications do you receive to identify a CSS update and how is the EDRS interface updated?</li> </ul> </li> </ul>
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# 5.4 Unmetered Supplies Operator

Business Process	Questions	Guidance Points	MHHS	Participant Responses
Area			requirements	
5.4.1.1 Change of Data Service In line with MHHSP- BP003	<ul> <li>a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment)</li> <li>b) How will you send the Submeter ID, Locations, Latitude/longitude information and PECU Arrays locations?</li> </ul>	<ul> <li>For Question 5.4.1.1 A - Your response should include the following:</li> <li>A disclosure of changes 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 and REC Codes. 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-MS- 029	

		<ul> <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 operate in line with your BSC and REC 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> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> <li>For Question 5.4.1.1 B – The response should address the following areas:</li> <li>An outline of how your system is configured to send MPAN related details (Submeter ID, Locations, Latitude/longitude information and PECU Arrays locations) to the UMSDS.</li> </ul>		
5.4.1.2 <b>Disconnections</b> In line with MHHSP- BP007	a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes; this may be nothing). In the case that changes have been made, how have you tested these updated	<ul> <li>For Question 5.4.1.2 A - Your response should include the following:</li> <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</li> </ul>	MHHS-BR-MS- 038	

<ul> <li>E2E business process (e.g. E2E process changes tested in own UIT environment)</li> <li>b) How do you receive notification of a disconnection request and what automated or manual interactions are required to process the notification?</li> <li>c) How do you request the LDSO to carry out the disconnection once the Supply Point has been de-energised and the inventory updated?</li> </ul>
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		Processes/system controls in place to ensure disconnection requests are only sent to the LDSO following de-energisation of the Supply point and updates to inventory.		
5.4.1.3 Change of Energisation Status In line with MHHSP- BP008	<ul> <li>a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to the E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment)</li> <li>b) how do you receive a request for a change of energisation status from a customer (or via this Supplier) and how do you validate it is correct?</li> <li>c) What actions are taken upon receipt of a request to the change of energisation status?</li> </ul>	<ul> <li>For Question 5.4.1.3 A – Your response should include the following:</li> <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 operate in line with your BSC and REC Code Requirements, as above.</li> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> <li>For Question 5.4.1.3 B – The response should address the following areas:</li> </ul>	MHHS-BR-MS- 037 MHHS-BR-MS- 047 MHHS-BR-MS- 048	

		<ul> <li>An outline of how your system/processes are configured to receive and process requests for a change of energisation status from the Supplier, LDSO or customers, including if this process differs from different requestors. Please refer receipt of the IF- 007 and triggering the IF-008 flow in your response.</li> <li>For Question 5.4.1.3 C – The response should address the following areas:</li> <li>Upon receipt of a request to change energisation status any user/manual interactions required to complete the change.</li> <li>The process in place to update the Unmetered Supplies Inventory in line with the energisation change, as set out in the UMSO Method Statement.</li> <li>Once the change has been actioned, any process in place to finalise and confirm the change is complete to the requestor with the correct effective from date.</li> </ul>		
5.4.1.4 <b>New</b> <b>Connections</b> In line with MHHSP- BP001	a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? (e.g. to inputs, workflows, integrations, and	<ul> <li>For Question 5.4.1.4 A – Your response should include the following:</li> <li>A disclosure of changes to systems and processes which</li> </ul>	MHHS-BR-MS- 033	

<ul> <li>downstream systems and processes; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment)</li> <li>b) How do you request the LDSO to set up an MPAN in Central Switching Service (CSS) for a new connection?</li> <li>c) How do you verify that an unmetered supply new connection request is appropriate?</li> </ul>	<ul> <li>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 operate in line with your BSC and REC Code Requirements, as above.</li> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> <li>For Question 5.4.1.4 B – The response should address the following areas:</li> <li>An outline of how requests to the LDSO to set up an MPAN in CSS for a New Connection are sent.</li> <li>Validation checks in place to ensure any information sent to the LDSO regarding the new MPAN is complete and accurate.</li> </ul>		
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5.4.1.5 Fault	a) Excluding t	the functional	For Question 5.4.1.5 A – Your	MHHS-BR-MS-	
Resolution	elements te	ested in PIT/SIT/QT,	response should include the	080	
		er changes have been	following:		
	•	our E2E business			
	• •	e.g. to inputs,	A disclosure of changes to		
		integrations, and	systems and processes which		
		m systems and	have not been tested as part of		
		; this may be n the case that	PIT/SIT/QT, as above.		
		ave been made, how	Any instances where you have		
	-	ested these updated	<ul> <li>Any instances where you have opted out of receiving DIP</li> </ul>		
	-	ess process ( <i>e.g.</i>	Publications, and how you will		
		ss changes tested in	ensure you will receive this		
		nvironment)	information.		
	b) How do yo		<ul> <li>How you will gain assurance that even with these additional</li> </ul>		
	notification		changes, your wider end-to-end		
		d Supplies Data	systems and processes will still		
	Service (U	MSDS)?	enable you to operate in line		
	a) What actio	na ara takan whan	with your BSC and REC Code		
	,	ns are taken when ations are received?	Requirements, as above.		
			<ul> <li>If there are no relevant</li> </ul>		
	d) How are fa	ults monitored and	additional changes to disclose		
	tracked?		for this business process,		
			please write "N/A".		
			For Question 5.4.1.5 B – The		
			response should address the		
			following areas:		
			<ul> <li>How your system is configured to receive fault notifications from</li> </ul>		
			the UMSDS. Please include any		
			automation or manual		
			interaction.		
			For Question 5.4.1.5 C – The		
			response should address the		
			following areas:		

The process to ensure faults     are rectified in a timely manner.	
For Question 5.4.1.5 D – The response should address the following areas:	
• Processes in place to track faults through to resolution, including processes to inform the UMSDS when resolution may be delayed.	

Data Management	Questions	Guidance Points	MHHS requirements	Participant Responses
Area				
5.4.2.1 Unmetered Supplies Inventory In line with MHHSP- BP004	<ul> <li>a) What controls do you have inplace 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?</li> <li>b) How do you receive, validate and store new inventory information?</li> <li>c) How will you investigate any rejections?</li> <li>d) how do you receive and maintain valid Charge Codes, Switch Regimes and combinations thereof?</li> </ul>	<ul> <li>For Question 5.4.2.1 A – The response should address the following areas:</li> <li>Processes and/or systems used to receive and maintain records of customer inventories.</li> <li>For Question 5.4.2.1 B – The response should address the following areas:</li> <li>The method of providing the customer UMS inventories to the UMSDS, in line with the UMSO Method statement</li> <li>For Question 5.4.2.1 C – The response should address the following areas:</li> <li>The process for investigating any discrepancies and/or rejections in consultation with the customer as required</li> </ul>	MHHS-BR-MS-031 MHHS-BR-MS-032	

#### 5.5 Advanced Data Services

Business Process	Questions	Guidance Points	MHHS	Participant Responses
Area			requirements	
5.5.1.1 Change of Data Service In line with MHHSP- BP002 & MHHSP- BP003	<ul> <li>a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment)</li> <li>b) For advanced meters how will you collect the opening UTC period level data?</li> <li>c) Once de-appointed how will you collect the closing UTC period level data?</li> </ul>	<ul> <li>For Question 5.5.1.1 A – Your response should include the following:</li> <li>A disclosure of changes 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 and REC Codes. 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- 005 MHHS-BR-DS- 022 MHHS-BR-DS- 026.3 MHHS-BR-DS- 026.6 MHHS-BR-DS- 108	

How you will gain assurance	
that even with these additional	
changes, your wider end-to-end	
systems and processes will still	
enable you to operate in line	
with your BSC and REC 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.	
If there are no relevant	
additional changes to disclose	
for this business process,	
please write "N/A".	
For Question 5.5.1.1 B – Your	
response should include the	
following:	
lonowing.	
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	
The process for deleting any	
metering details received where	
a proposed appointment has	
been rejected	
Where an appointment has	
been accepted, how you will attempt to collect the UTC	
period level data from an	
advanced meter	

		<ul> <li>For Question 5.5.1.1 C – Your response should include the following:</li> <li>Once de-appointed, how you will collect the closing UTC period level data to use for final data processing</li> <li>The process for storing valid register reads for use in the estimation process where no better data is available.</li> <li>How you will generate an estimated reading where no reads are provided alongside a</li> </ul>		
		change in Energisation Status, and how you will ensure this is completed within the 5 working day SLA.		
5.5.1.2 Meter Types	a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to the E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment)	<ul> <li>For Question 5.5.1.2 A – Your response should include the following:</li> <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> </ul>	MHHS-BR-DS- 045 MHHS-BR-DS- 049	
	b) When the meter is unable to be read what process and follow up action do you take?	How you will gain assurance that even with these additional changes, your wider end-to-end systems and processes will still enable you to operate in line		

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		with your BSC and REC Code Requirements, as above.		
		<ul> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> </ul>		
		For Question 5.5.1.2 B – Your response should address the following:		
		<ul> <li>The appropriate method you will receive, and process Supplier provided register read(s) for Traditional and Advanced meters</li> </ul>		
		How you will schedule and manage site visits to Smart/AMR sites where agreed with the Supplier		
		<ul> <li>When a read cannot be obtained, what process is instigated to follow up and obtain data for the missing periods</li> </ul>		
		<ul> <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>		
5.5.1.3 Identifying Faults	a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business	For Question 5.5.1.3 A – Your response should address the following:	MHHS-BR-DS- 147	

process? (e.g. to inputs,	A disclosure of changes to
workflows, integrations, a downstream systems an	
processes; this may be	PIT/SIT/QT, as above.
nothing). In the case that	
changes have been mad have you tested these up	opted out of receiving DIP
E2E business process (e	.g. Publications, and how you will ensure you will receive this
E2E process changes te own UIT environment)	sted in information.
own off environment)	
b) The Advanced Data Ser	IDALEVED WITH THESE ADDITIONAL
(ADS) needs to identify a faulty metering equipment	iny changes, your wider end-to-end
notify the Advanced Mete	
Service and the Supplier is your process for this?	
is your process for this?	Requirements, as above.
	If there are no relevant
	additional changes to disclose for this business process,
	please write "N/A".
	For Question 5.5.1.3 B – Your
	response should address the
	following:
	How you will receive notification
	(either in a system/portal or
	otherwise e.g. email) from the Supplier when there is a fault
	with the metering equipment
	The process for investigating
	faults in a timely manner once
	notification has been received
	How feedback of faults,
	(including progress of resolution and any delays encountered)

		<ul> <li>will be provided to the Supplier 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>		
5.5.1.4 Related Meter Point Administration Number (MPAN)s and/or Import/Export meters	<ul> <li>a) How do you identify related MPANs or Import/Export linked meters?</li> <li>b) How do you receive/maintain all relevant Meter Technical Details?</li> </ul>	<ul> <li>For Question 5.5.1.4 – Your response should include the following: <ul> <li>The process for identifying:</li> <li>Related MPANs</li> <li>Import/Export linked meters</li> </ul> </li> <li>For Question 5.5.1.4 B – Your response should include the following: <ul> <li>How you ensure all MTDs have been received for both Related or Import/Export group MPANs</li> </ul> </li> <li>The process for maintaining records of all MTDs, and where required, investigating any discrepancies with data received from the Registration Service</li> </ul>	MHHS-BR-DS- 119	

Data Management	Questions	Guidance Points	MHHS	Participant Responses
Area			requirements	
5.5.2.1 Consumption Data	<ul> <li>a) What controls do you have inplace 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?</li> <li>b) How have you integrated the</li> </ul>	<ul> <li>For Question 5.5.2.1 A – Your response should address the following:</li> <li>When updates are received what automated and manual processes are in place to update the system in line with business processes.</li> <li>For Question 5.5.2.1 B – Your</li> </ul>	MHHS-BR-DS- 072 MHHS-BR-DS- 083 MHHS-BR-DS- 086 MHHS-BR-DS- 088	
	Advanced Validation & Estimation Method statement into your estimation procedures?	<ul> <li>response should address the following activities, which should be completed in line with the Advanced Validation and Estimation Method statement:</li> <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>		
5.5.2.2 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?	<ul> <li>For Question 5.5.2.2 A – Your response should address the following:</li> <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	

	<ul> <li>For Question 5.5.2.2 B – Your response should address the following:</li> <li>Aside from the DIP and DTN do you have arrangements with Metering Services to receive MTDs in a different way?</li> </ul>	
service which does not turn out to be the metering service appointed? Please note it is not required as part of your response to outline minor changes in the use of the DTN e.g. to update the new role codes.	<ul> <li>For Question 5.5.2.2 C – Your response should address the following:</li> <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> <li>For Question 5.5.2.2 D - Your response should address the following:</li> <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>	

### 5.6 Smart Data Services (SDS)

Business Process Area	Questions	Guidance Points	MHHS requirements	Participant Responses
5.6.1.1 Meter Data Retriever (MDR)	<ul> <li>a) Are you intending on Qualifying as a MDR as defined in Smart Energy Code (SEC)?</li> <li>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?</li> <li>b) What controls have you got in place to ensure that you are able to communicate with an MDR that is appointed by a Supplier?</li> </ul>	<ul> <li>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.</li> <li>If you do not plan to Qualify as an MDR:</li> <li>The process for ensuring there is a Qualified MDR in place for all DCC enrolled meters</li> <li>The chosen communication methods between the SDS and an MDR appointed by a Supplier</li> </ul>	MHHS-BR- DS-010	
5.6.1.2 Appointment and/or De- Appointment In line with MHHSP- BP00	a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment)	<ul> <li>For Question 5.6.1.2 A – Your response should include the following:</li> <li>A disclosure of changes 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 and REC Codes. Additionally, this may be because you are placing reliance on testing</li> </ul>	MHHS-BR- DS-008.1 MHHS-BR- DS-023.1 MHHS-BR- DS-022 MHHS-BR- DS-024	

register reads?	<ul> <li>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> <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 operate in line with your BSC and REC 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> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> <li>For Question 5.6.1.2 B – Your response should include the following:</li> <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>	
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		<ul> <li>For Question 5.6.1.2 C – Your response should include the following:</li> <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> <li>The process for downloading, maintaining, and sending cumulative and register reads for Smart meters</li> </ul>		
5.6.1.3 Meter Readings	<ul> <li>a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment)</li> <li>b) What third party involvement (if any) is involved in the collection process?</li> <li>c) When the meter is unable to be read what process and follow up action do you take?</li> </ul>	<ul> <li>For Question 5.6.1.3 A – Your response should address the following:</li> <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 operate in line with your BSC and REC Code Requirements, as above.</li> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> <li>For Question 5.6.1.3 B – Your response should include the following:</li> </ul>	MHHS-BR- DS-046 MHHS-BR- DS-047 MHHS-BR- DS-048 MHHS-BR- DS-045	

	d) 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?	<ul> <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> <li>For Question 5.6.1.3 C – Your response should include the following:</li> <li>Processes to investigate where meter reads cannot be obtained, and where this process differs with Smart meters (if any).</li> <li>For Question 5.6.1.3 D – Your response should include the following:</li> <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>		
5.6.1.4 Meter Technical Details (MTDs)	<ul> <li>a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business</li> </ul>	<ul> <li>For Question 5.6.1.4 A - Your response should include the following:</li> <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> </ul>	MHHS-BR- DS-006 MHHS-BR- DS-016 MHHS-BR- DS-121 MHHS-BR- DS-023.1	

ГТ	
changes tested in own UIT environment)	How you will gain assurance that even with these additional changes, your wider end-to-end systems and processes will still enable you to
b) How do you receive MTDs through different sources e.g. DTN and MDR/DIP?	operate in line with your BSC and REC Code Requirements, as above.
c) How do you investigate discrepancies when MTDs are received from the DIP?	<ul> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> </ul>
d) How will you process MTDs received from a metering service which does not turn	For Question 5.6.1.4 B - Your response should include the following:
out to be the metering service appointed?	The method(s) used to receive and maintain records of MTDs for Traditional Meters
e) How do you maintain your metering recording accurately?	For Question 5.6.1.4 C - Your response should include the following:
Please note it is not required as part of your response to outline minor changes in the use of the DTN e.g. to update the new role codes.	Where Related MPANs or Import/Export linked meters exist, the process to ensure MTDs are received for all MPANs in the Related MPAN or Import/Export group
	For Question 5.6.1.4 D – Your response should include the following:
	• The process for investigating any discrepancies against data received from the Registration Services
	For Question 5.6.1.4 E - Your response should include the following:
	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		
5.6.1.5 Identify Faults	<ul> <li>a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment)</li> <li>b) The SDS needs to identify any faulty metering equipment and notify the Smart Metering Service and the Supplier. What is your process for this?</li> </ul>	<ul> <li>For Question 5.6.1.5 A - Your response should include the following:</li> <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 operate in line with your BSC and REC Code Requirements, as above.</li> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A"</li> <li>For Question 5.6.1.5 B – Your response should include the following:</li> <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>	MHHS-BR- DS-147.1	

5.6.1.6 Related Meter Point Administration Number (MPAN) s and/or Import/Export meters	<ul> <li>a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment)</li> <li>b) How do you identify related MPANs or Import/Export linked meters?</li> <li>c) How do you receive/maintain all relevant Meter Technical</li> </ul>	<ul> <li>For Question 5.6.1.6 A – Your response should include the following:</li> <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 operate in line with your BSC and REC Code Requirements, as above.</li> </ul>	MHHS-BR- DS-146 MHHS-BR- DS-121	
		changes to disclose for this business process, please write "N/A".		

## Data Management

Data Management	Questions	Guidance Points	MHHS requirements	Participant Responses
Area				
5.6.2.1 Estimation Values	<ul> <li>a) What controls do you have inplace 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</li> </ul>	<ul> <li>For Question 5.6.2.1 A – Your response should include the following:</li> <li>Processes for validating UTC Period Level Consumption Data for a given submission, as well as any estimates.</li> </ul>	MHHS-BR-DS-084 MHHS-BR-DS-087 MHHS-BR-DS-089 MHHS-BR-DS-092 MHHS-BR-DS-109	
	<ul> <li>about by MHHS?</li> <li>b) Please outline how you have integrated the Smart Validation &amp; Estimation Method Statement into your local working procedures. This should look to cover estimation for missing and/or invalid periods or re-estimating consumption.</li> <li>c) Please outline how the most appropriate method is selected from the SDS method statement.</li> <li>Please note this question is not asking for an explanation as to how connection to the DIP is made and maintained.</li> </ul>	<ul> <li>For Question 5.6.2.1 B&amp;C – Your response should include the following:</li> <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> <li>The process for storing valid register reads for use in the estimation process where no better data is available.</li> <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>		

# 5.7 Unmetered Supplies Data Service (UMSDS)

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

#### **Business Processes**

Business	Questions	Guidance Points	MHHS requirements	Participant Responses
Process Area				
5.7.1.1 Appointments and/or De- Appointments In line with MHHSP-BP002	<ul> <li>a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment)</li> <li>b) How do you receive the notification from the Registration Service and any supporting information confirming the UMSO appointment?</li> <li>c) How do you obtain the information on submeters, location, latitude/longitude and Photoelectric Control Unit (PECU) Array details?</li> </ul>	<ul> <li>For Question 5.7.1.1 A – Your response should include the following:</li> <li>A disclosure of changes 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 and REC Codes. 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> <li>How you will gain assurance that even with these additional changes, your wider end-to-end systems and</li> </ul>	MHHS-BR-DS-002 MHHS-BR-DS-017	

		<ul> <li>processes will still enable you to operate in line with your BSC and REC 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> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> </ul>	
		<ul> <li>For Question 5.7.1.1 B – Your response should address the following:</li> <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>	
		<ul> <li>For Question 5.7.1.1 C – Your response should address the following:</li> <li>The agreed delivery method of MPAN details from the UMSO</li> </ul>	
5.7.1.2 Data Collection	a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes; this may be nothing). In the case that changes have	<ul> <li>For Question 5.7.1.2 A – Your response should include the following:</li> <li>A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above.</li> </ul>	MHHS-BR-DS-061 MHHS-BR-DS-063 MHHS-BR-DS-064 MHHS-BR-DS-065 MHHS-BR-DS-066 MHHS-BR-DS-067 MHHS-BR-DS-068

	been made, how have you tested	Any instances where you have		
	these updated E2E business	opted out of receiving DIP		
	process (e.g. E2E process	Publications, and how you will		
	changes tested in own UIT environment)	ensure you will receive this information.		
	environment)	mornation.		
	How do you receive and validate	How you will gain assurance that		
	D0388 unmetered supplies	even with these additional changes,		
	inventory from the UMSO?	your wider end-to-end systems and processes will still enable you to		
c)	How do you send the D0389	operate in line with your BSC and		
	UMS response following	REC Code Requirements, as		
	validation?	above.		
(P	Upon being appointed how do	If there are no relevant additional		
	you obtain and manage the	changes to disclose for this		
	provision of the PECU Arrays	business process, please write		
	data and support delivery of	"N/A".		
	consumption data?			
e)	Upon being appointed how do	For Question 5.7.1.2 B – Your response should address the following:		
	you obtain details of the Central	should address the following.		
	Management System (CMS)	The agreed method for receiving		
	from the customer, UMSO or CMS provider?	and validating D0388 flows from the		
		UMSO		
	How do you obtain the switching	For Question 5.7.1.2 C – Your response		
	times and load information from	should address the following:		
	the CMS?			
		<ul> <li>The sending of the D0389 response flow following rejection, outlining</li> </ul>		
		whether each MPAN is accepted or		
		rejected, and where rejected, the		
		reason for rejection		
		For Question 5.7.1.2 D – Your response		
		should address the following:		
		<ul> <li>The method for receiving and maintaining the provision of PECU</li> </ul>		

			arrays in line with the UMSDS Method Statement
			For Question 5.7.1.2 E – Your response should address the following:
			<ul> <li>Ho How you will retrieve details of the Central Management System from the customer, UMSO 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>
			For Question 5.7.1.2 F – Your response should address the following:
			<ul> <li>Your chosen method for obtaining and validating switching times and load information from CMS</li> </ul>
5.7.1.3 Identifying Faults	a)	Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? ( <i>e.g. to inputs,</i> <i>workflows, integrations, and</i> <i>downstream systems and</i> <i>processes; this may be nothing</i> ). In the case that changes have been made, how have you tested these updated E2E business process ( <i>e.g. E2E process</i> <i>changes tested in own UIT</i> <i>environment</i> )	<ul> <li>For Question 5.7.1.3 A – Your response should include the following:</li> <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> </ul>
	b)	What is the process to receive fault notifications?	<ul> <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>

c) What actions do you take to investigate faulty equipment?	<ul> <li>operate in line with your BSC and REC Code Requirements, as above.</li> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> </ul>	
	<ul> <li>For Question 5.7.1.3 B – Your response should address the following:</li> <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> </ul>	
	<ul> <li>The UMSDS needs to investigate any faulty metering equipment, identified, or notified to them.</li> <li>For Question 5.7.1.3 C – Your response</li> </ul>	
	<ul> <li>should address the following:</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 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>	

Data Management	Questions	Guidance Points	MHHS	Participant Responses
Area			requirements	
5.7.2.1 Data Processing	<ul> <li>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?</li> <li>b) When a new load shape is available how will you reprocess the previously submitted data?</li> <li>c) How do you calculate consumption for all UTC periods?</li> <li>d) How do you re-calculate consumption when better data becomes available?</li> </ul>	<ul> <li>For Question 5.7.2.1 A – Your response should address the following:</li> <li>For Question 5.7.2.1 B – Your response should address the following:</li> <li>Process to, in exception circumstances when a new load shape is made available, reprocess previously submitted data following the UMSDS Method Statement</li> <li>For Question 5.7.2.1 C – Your response should address the following:</li> <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> <li>For Question 5.7.2.1 D – Your response should address the following:</li> <li>Circumstances in which you may re-calculate consumption data, and how this re-calculation is performed</li> </ul>	MHHS-BR-DS- 078 MHHS-BR-DS- 085 MHHS-BR-DS- 090	

# 5.8 Metering Equipment Manager (MEM)

Business Process Area	Questions	Guidance Points	MHHS requirements	Participant Responses
5.8.1.1 Metering Role	<ul> <li>a) Please confirm for which of the following segments you intend to operate in:</li> <li>Smart</li> <li>Advanced</li> <li>Smart and Advanced</li> </ul>	<ul> <li>For Question 5.8.1.1 A – Your response should include the following:</li> <li>Which MEM segment(s) you are applying to Qualify in, hence complete your testing for.</li> </ul>		
5.8.1.2 Appointments In line with MHHSP- BP002 and MHHSP- BP003	<ul> <li>a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment)</li> <li>b) What controls do you have in place to ensure the endto-end process is carried out within MHHS defined timescales as outlined in the Operational Choreography and baselined in the relevant codes?</li> </ul>	<ul> <li>For Question 5.8.1.2 A – Your response should include the following:</li> <li>A disclosure of changes 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 and REC Codes. 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-MS- 001 MHHS-BR-MS- 002 MHHS-BR-MS- 003 MHHS-BR-MS- 004 MHHS-BR-MS- 005 MHHS-BR-MS- 006 MHHS-BR-MS- 007 MHHS-BR-MS- 008 MHHS-BR-MS- 008.1 MHHS-BR-MS- 009	

This section will be updated in line with REC Change R0064 to refer to Meter Operator Agents (MOAs) rather than electricity Metering Equipment Manager (MEM).

c) What controls do you hav in place to identify auto d appointments by the Registration Services?		025 MHHS-BR-MS- I 040 MHHS-BR-MS-
	<ul> <li>For Question 5.8.1.2 B – Your response should include the following:</li> <li>Controls to ensure Appointment Activities are carried out in line with MHHS defined timescales and messages are processed within 60 minutes of receipt, outlined in the operational choreography. This may include detective controls such as ongoing monitoring.</li> </ul>	

		<ul> <li>For Question 5.8.1.2 C – Your response should include the following:</li> <li>Controls in place to identify where you have been automatically de-appointed as the MEM, for example where the change of meter segment process was not aligned with the appointment process.</li> <li>Controls to ensure that your own records are up-to-date to reflect that you were automatically de-appointed.</li> <li>How you will work with the Supplier to resolve the issue.</li> </ul>	
5.8.1.3 Change of Energisation Status In line with MHHSP- BP008	<ul> <li>a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes; this may be nothing). In the case that changes have been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment)</li> <li>b) What controls do you have in place to ensure that for all</li> </ul>	<ul> <li>For Question 5.8.1.3 A – Your response should include the following:</li> <li>A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above.</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 operate in line with your BSC and REC Code Requirements, as above.</li> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> </ul>	MHHS-BR-MS- 041 MHHS-BR-MS- 042 MHHS-BR-MS- 042.1 MHHS-BR-MS- 043 MHHS-BR-MS- 044 MHHS-BR-MS- 045 MHHS-BR-MS- 046 MHHS-BR-MS- 046.1

	aspects of the change of energisation process, that communication of relevant information is sent within the timescales set out in the REC. ( <i>this response should</i> <i>include the following areas:</i> <i>a. Change of</i> <i>energisation status</i> <i>response (smart,</i> <i>advanced, and</i> <i>traditional)</i> <i>b. Capture and publish</i> <i>cumulative read</i> <i>c. When change of</i> <i>energisation cannot</i> <i>be actioned</i> <i>d. Investigating and</i> <i>re-submitting</i> <i>rejections</i> )	<ul> <li>For Question 5.8.1.3 B – Your response should include the following:</li> <li>Controls to ensure change of energisation status updates from the LDSO are processed within 3 working days.</li> <li>Controls in place to ensure that you have captured the final Meter Register Readings and provided these to the Data Service before disposing of or re-using the meter.</li> <li>In the case that the change of energisation cannot be actioned, how this will be captured in your internal records, communicated to the LDSO, and how you will determine the next steps to resolve the issue.</li> </ul>	MHHS-BR-MS- 049 MHHS-BR-MS- 050
5.8.1.4 Change of Market Segment In line with MHHSP- BP011	a) Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your E2E business process? ( <i>e.g. to inputs,</i> <i>workflows, integrations, and</i> <i>downstream systems and</i> <i>processes; this may be</i> <i>nothing</i> ). In the case that changes have been made, how have you tested these updated E2E business process ( <i>e.g. E2E process</i> <i>changes tested in own UIT</i> <i>environment</i> )	<ul> <li>For Question 5.8.1.4 A – Your response should include the following:</li> <li>A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above.</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 operate in line with your BSC and REC Code Requirements, as above.</li> <li>If there are no relevant additional changes to disclose for this business process, please write "N/A".</li> </ul>	MHHS-BR-MS- 092 MHHS-BR-MS- 093 MHHS-BR-MS- 094 MHHS-BR-MS- 095 MHHS-BR-MS- 096 MHHS-BR-MS- 097 MHHS-BR-MS- 097.1

	b)	What controls do you have in place to ensure that you can carry out a change of segment meter exchange and publish details and reads where you are not formally appointed as the Metering Service but do have an accepted prospective appointment.	<ul> <li>For Question 5.8.1.4 B – Your response should include the following:</li> <li>Controls do you have in place to ensure you have identified meters which you are not appointed to, but have accepted a prospective appointment.</li> <li>How your systems will reflect this status and enable related processes such as a change of segment meter exchange.</li> </ul>		
5.8.1.5 Migration Requirements	a)	What controls do you have in-place to ensure you meet the specific appointment and meter technical details requirements during a migration?	<ul> <li>For Question 5.8.1.5 A – Your response should include the following:</li> <li>What controls will you have in place to ensure MTD accuracy for migration. For example, during a reverse migration how will you ensure that you continue to monitor and meet your SLAs regarding sharing meter technical details.</li> <li>Additionally, when you identify that meter technical details change after these have already been sent by the incoming meter service as part of a migration, how will you ensure you send the updated meter technical details.</li> </ul>	MHHS-Migration- CoA(MS)-MOP- 002 MHHS-Migration- CoA(MS)-MOP- 004 MHHS-Migration- CoA(MS)-MOP- 005 MHHS-Migration- CoA(MS)-MOP- 006 MHHS- RMigration- CoA(MS)-MOP- 001 MHHS- RMigration- CoA(MS)-MOP- 002 MHHS- RMigration- CoA(MS)-MOP- 003 MHHS-RMigration- CoA(MS)-MOP- 003 MHHS-Migration-	

MHHS-Migration-
Mis-MOP-002
MHHS-Migration-
Mis-MOP-006
MHHS-
RMigration-
CoA(MS)-MS-
003
MHHS-Migration-
Mis-MS-001
MHHS-Migration-
Mis-MS-002
MHHS-Migration-
Mis-MS-006

## Data Management

Data Management Area	Questions	Guidance Points	MHHS requirements	Participant Responses
5.8.2.1 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 REC obligations brought about by MHHS?	<ul> <li>For Question 5.8.2.1 A – Your response should include the following:</li> <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-MS- 017 MHHS-BR-MS- 018 MHHS-BR-MS- 019 MHHS-BR-MS- 020 MHHS-BR-MS- 021	

b)	What controls do you have in place to identify when you need to send Meter Technical Details during a Change of Supplier and/or MEM Appointment.	<ul> <li>For Question 5.8.2.1 B – Your response should include the following:</li> <li>Controls you have in place to capture when MTDs need to be sent, and how you will monitor these are sent within the</li> </ul>	MHHS-BR-MS- 022 MHHS-BR-MS- 023 MHHS-BR-MS- 024
c) d)	What controls do you have in-place to ensure you identify where you need to send Meter Technical Details to a prospective Advanced Data Service, and for Traditional Meters to a prospective Smart Data Service. How will you identify and	<ul> <li>timeframes outlined in the REC.</li> <li>For Question 5.8.2.1 C – Your response should include the following:</li> <li>Controls you have in place to capture when MTDs need to be sent, and how you will monitor these are sent within the timeframes outlined in the REC.</li> </ul>	MHHS-BR-MS- 026 MHHS-BR-MS- 027 MHHS-BR-MS- 028 MHHS-BR-MS- 030 MHHS-BR-MS- 058 MHHS-BR-MS-
	investigate any discrepancies in Meter Technical Details received from the incumbent Metering Service and those received from the Registration Service?	<ul> <li>For Question 5.8.2.1 D – Your response should include the following:</li> <li>Proactive controls to identify any discrepancies between MTDs received from incumbent MEM and those received from</li> </ul>	062 MHHS-BR-MS- 063
e)	What controls do you have in place to identify missing Meter Technical Details following a MEM appointment to ensure you request these Meter	<ul> <li>the Registration Service.</li> <li>Where discrepancies are identified, what business processes will you have in place to investigate and resolve the difference in a timely manner.</li> </ul>	

	Technical Details from the losing MEM.	<ul> <li>For Question 5.8.2.1 E – Your response should include the following:</li> <li>Controls to validate the Meter Technical Details received on appointment are complete, and in the case that they are not complete, how you will ensure you request these details from the losing MEM in a timely manner.</li> </ul>	
5.8.2.2 Customer Direct Contracts	<ul> <li>a) What controls do you have in-place to ensure that the published Customer Direct Contract details are accurate and up to date.</li> </ul>	<ul> <li>For Question 5.8.2.2 A – Your response should include the following:</li> <li>Controls in place to ensure that you have 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-MS-         010         MHHS-BR-MS-         011         MHHS-BR-MS-         012         MHHS-BR-MS-         013         MHHS-BR-MS-         014         MHHS-BR-MS-         015         MHHS-BR-MS-         016
5.8.2.3 Registration 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 and REC obligations brought about by MHHS? (this is relevant to: MPL Address, Domestic Premises Indicator, Related	<ul> <li>For Question 5.8.2.3 A – Your response should include the following:</li> <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.</li> </ul>	MHHS-BR-MS- 057 MHHS-BR-MS- 058.2 MHHS-BR-MS- 058.3 MHHS-BR-MS- 065 MHHS-BR-MS- 066

	MPAN, Energy Direction, Metered Status, SMSO details, Import/Export links, Profile Class / SSC details, Energisation Status, MAP)		MHHS-BR-MS- 066.1 MHHS-BR-MS- 066.2 MHHS-BR-MS- 066.3 MHHS-BR-MS- 066.4 MHHS-BR-MS- 066.5 MHHS-BR-MS- 066.6 MHHS-BR-MS- 0677	
5.8.2.4 Faults	<ul> <li>a) What controls do you have in-place to ensure that faults are investigated and updates sent within the timescales set out in the REC?</li> </ul>	<ul> <li>For Question 5.8.2.4 A – Your response should include the following:</li> <li>Controls in place to ensure you identify where you are required to investigate a fault, and that an appropriate work item is created.</li> <li>How you will ensure that you send the required Market Messages depending on the timeline and status of the investigation as per REC Schedule 14.</li> </ul>	MHHS-BR-MS- 052 MHHS-BR-MS- 078 MHHS-BR-MS- 079	

5.8.2.5 Consumption Data and Cumulative Reads	<ul> <li>a) What controls do you have in-place to ensure that you capture and send the latest Consumption Data and Cumulative Reads when needed</li> </ul>	<ul> <li>For Question 5.8.2.5 A – Your response should include the following:</li> <li>Controls in place to ensure that you capture latest meter readings when on-site and that these maintained accordingly.</li> <li>Controls in place to ensure that you capture and provide Advanced and Smart Consumption Data in line with your bilateral service agreements with Suppliers.</li> </ul>	MHHS-BR-MS- 054 MHHS-BR-MS- 055 MHHS-BR-MS- 061
5.8.2.6 Meter Works	<ul> <li>a) What controls do you have in-place to ensure that once meter work is completed that updates are sent within the timescales set out in the REC?</li> </ul>	<ul> <li>For Question 5.8.2.6 A – Your response should include the following:</li> <li>Controls in place to ensure that you send the required Market Messages within the timescales identified in REC Schedule 14, including in areas such as: <ul> <li>Meter change acceptances and rejections</li> <li>Completion of metering work (e.g. installation, removal, exchange)</li> <li>Notification of failure to install or energise metering system</li> <li>Proving tests</li> </ul> </li> </ul>	MHHS-BR-MS-         037.1         MHHS-BR-MS-         051         MHHS-BR-MS-         053         MHHS-BR-MS-         056         MHHS-BR-MS-         058.1         MHHS-BR-MS-         059         MHHS-BR-MS-         060         MHHS-BR-MS-         060         MHHS-BR-MS-         080.1