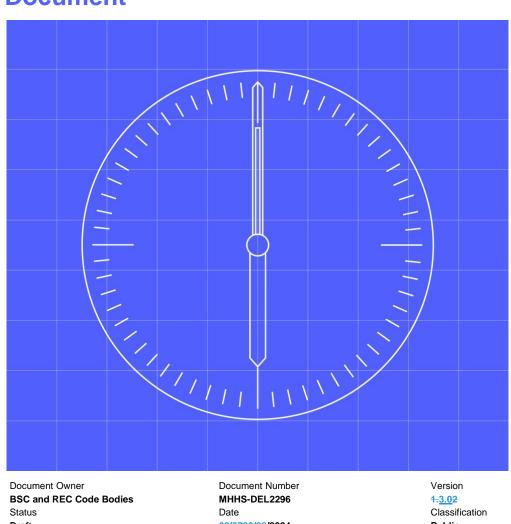
MHHS Qualification Assessment Document



Document Owner BSC and REC Code Bodies Status Draft

MHHS-DEL2296 Date 02/0706/08/2024 Version 1.3.02 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 nonfunctional, 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.
02/07/2024	Elexon and REC Performance Assurance	1.2	Draft version for consultation, following updates from industry consultation as well as covering Non-Functional, Migration and Operational requirements and any updates relating to the Functional requirements.
06/08/2024	Elexon and REC Performance Assurance	<u>2.0</u>	Second draft of the second iteration – this document has been updated to reflect consultation comments for QWG review ahead of submission to QAG, BSC and REC PABs for approval.
<u>15/08/2024</u>	Elexon and REC Performance Assurance	<u>3</u> 2.0	Second draft of the second iteration — tPost 4 QWG, this document has been updated to update DIP section ahead of submission to QAG, BSC and REC PABs for approval.

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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 Qualification Approach and Plan (QA&P) which sets out the purpose of MHHS Qualification during the MHHS Programme and the high-level plan and requirements for Programme Participants to undertake in relation to the Balancing and Settlement Code (BSC) and Retail Energy Code (REC).

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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.

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

- Confirmation of Pre-Integration Testing (PIT) completion¹ (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 readiness e.g. exception management etc, which is outlined in section 4.3, 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 QAD Submission**, and verified for the **Final QAD Submission**, 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 **Final QAD Submission** 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 - MHHS Qualification Glossary, 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 has been demonstrated as part of the QAD Portal Webinar. . 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.]

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¹ For Non-SIT LDSOs, as Non-Functional PIT is not due to be completed until 30th September 2024 and their Initial QAD Submission is due by 10th October 2024, therefore Code Bodies acknowledge that whilst Non-SIT LDSOs should have their PIT TCR and submit it as part of their initial QAD submission however, the Non-SIT LDSO QT Team may not have completed assurance of PIT yet.

4. Organisation Section

4.1 Company Sign Off

To be completed in final submission of the QAD

Name	Name of Programme Participant Organisation:		
Except	ne matters detailed below (delete if not applicable), having made appropriate enquiries of other directors and officials of the organisation, I confirm that:		
1)	information and evidence provided in this Qualification Assessment Document is true and accurate and not misleading because of any omission or ambiguity or any other reason.		
2)	processes and controls noted within this Qualification Assessment Document are an accurate reflection for our arrangements for MHHS live operations, and I nowledge 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)	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 ut by Marketwide Half-Hourly Settlement.		
Please	il any exception(s) here:		
Appro	ру		
Print I	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.	
4.2.2 Please confirm the system(s) you are using are is	If you were not required to submit a pre-qualification submission, then please select N/A. If there have been any changes, provide details and	
as outlined in your Pre-Qualification Submission form, or Placing Reliance Proposal, if you submitted one.	attach any updated documentation if available.	
4.2.3. 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 where applicable, agreed a work-off plan with the REC and BSC Code Managers for any outstanding defects.	[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. 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.	
4.2.4. Please confirm that all relevant process 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.	[Yes/No] If you have made all the relevant changes to your LWI's, then yes is an acceptable response. 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' relevant to your role(s) from Section 5 of the QAD.	
To be completed in final submission of the QAD	[Yes/No]	
4.2.5 4. Please confirm that for each testable MHHS requirement, you (and/or your third partythird-party software provider) have successfully completed the relevant testing requirements in SIT or QT, and where applicable, agreed a work-off plan with the REC and BSC Code Managers for any outstanding defects.	If you have or your third party software provider successfully tested, then yes is an acceptable response. If you and/or your third-party software provider have successfully completed the relevant testing for each MHHS requirement, then yes is an acceptable response.	
	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.	
	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 new and 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 supporting documentation outlining this.	
4.3.2 What adjustments, if any, are required in your organisation's resource-needs to meet the changes	This response should include a resourcing plan, specifically highlighting areas in which you would like	

brought about by MHHS, and how does your organisation intend to fulfil these requirements?	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 new and updated processes does not cause disruption to prevent you from meeting your obligations as set out in the BSC and/or REC (as appropriate)?	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 obligations?	
4.3.4. Please provide details on your systems and processes to ensure the dual running of pre-MHHS and post-MHHS systems and processes?	You should detail any rollback plans and how dual running of pre-MHHS and post-MHHS systems and processes may relieve specific retail or settlement risks.	
	Your response should include: To what extent you will be operating with similar or different systems for migrated and non-migrated meter points.	
	Where you will be operating with both migrated and non-migrated meter points, how you will ensure your systems capture whether a meter point is migrated, hence which business processes should be followed.	
	Any additional monitoring or early-life support activities you will complete to ensure that the correct business processes for migrated and non-migrated meter points are being followed.	

	New Entrants who are not Qualified in a legacy role should respond "N/A".	
4.3.5 What controls will you have in place to ensure you don't exceed migration thresholds? (Applicable to Suppliers Only)	You should provide details of steps you have taken/are taking to ensure you have made the required changes to meet and support the MHHS Requirements. You should list and explain your limitations to any migration thresholds, ensuring to advise what plans and processes you have in place to monitor them please also advise the level of resource that is required	
4.3.6 Please provide confirmation that you will adhere to volumes and timelines agreed in your migration plan. (Applicable to Suppliers Only)	Ensure your response includes a commitment to the specified volumes, meeting deadlines, monitoring progress, and communicating updates.	
4.3.7 What controls will you have in place to ensure you will adhere with the requirements as defined in the Migration Framework and the Migration Schedule agreed between your organisation and the Migration Control Centre?	A mechanism is required to select candidate MPANs for migration over time that adhere to the volumes agreed within the migration plan. Similarly, mechanisms and processes will be required to enable the consumption of capacity envelopes / guidelines and the subsequent production of migration plans that adhere to the Migration Framework.	

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?	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. Where applicable, provide risk treatment plans detailing the response to any risk associated with MHHS requirements and code obligations.	

4.5 Data Integration Platform (DIP)

Prior to moving to the production environment, the DIP Manager and/or the Code Bodies 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.]²

Questions	Participants Response
4.5.1. Do you comply with ISO 27000 series? (note: or	
equivalent provision in accordance with the DIP Rules)	
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	
legal constraints, for a minimum of 3 months of live	
data and 12 months archived	
(this can be via a DCP if applicable)	
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.	
(this can be via a DCP if applicable)	
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	
(this can be via a DCP if applicable)	
4.5.5. DIP Users systems are backed-up in	
accordance with best practice – demonstrable by	
adherence to ISO 27000 series processes and	

² https://www.elexon.co.uk/documents/change/issues/101-150/issue-101-issue-consultation/

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production of written process to back up systems, to	
include logical process diagrams;	
(this can be via a DCP if applicable)	
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 the DIP and	
the DIP User's systems.	
Please indicate where management of API Keys will	
rest with your DCP, if applicable (Digital Certificate key	
management is still applicable for all DIP users)	
4.5.7. Provide an overview of the processes,	
protocols, and liabilities in place between the DIP User	
and any third party you have contracted with 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.	
4.5.7. Provide an overview of processes, protocols,	
and liabilities between the DIP User and any third	
Party you have contracted with are in place.DCP	
where applicable.	
4.5.8. Do your systems using the DIP have the ability	
to store messages data received via the dip_DIPfor 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:	
a. Relevant data protection policies,	
 Relevant data protection processes, and 	
c. Where applicable, data protection impact	
assessments.	
4.5.10. Provide an overview of your contingency plan	
in place for data breaches, security events, and other	

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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? (LDSOs only)	
4.5.13. Have you signed the Access Agreement with the DIP Manager to start DIP onboardingif you are not a BSC Party? If not - this must be completed prior to your final QAD submission (see DSD002 Annex Four)	

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-121	
Platform (DIP)	have in place around Market Message	MHHS-BR-SU-122	
	management to ensure they are robust	MHHS-BR-SU-123.1	
	and appropriate to meet the BSC and	MHHS-BR-SU-123.2	
	REC obligations brought about by	MHHS-BR-SU-124	
	MHHS that are relevant to your role(s)?	MHHS-BR-SU-126	
	(e.g. - Error resolution	MHHS-BR-SU-127	
	- Error resolution - Monitoring of missing or erroneous	MHHS-BR-SU-128	
	DIP interfaces	MHHS-BR-SU-129	
	- Data backups and recovery	MHHS-BR-SU-140	
	processes)	MHHS-BR-LD-058	
	-	MHHS-BR-LD-059.1	
	This may include controls in systems	MHHS-BR-LD-059.2	
	directly to the DIP, or middleware such as the DIP adapter.	MHHS-BR-LD-062	
		MHHS-BR-LD-063	
		MHHS-BR-LD-064	
	You may wish to provide a written summary	MHHS-BR-MS-070	
	of these processes and controls, and/or upload relevant support documentation outlining these.	MHHS-BR-MS-071.2	
		MHHS-BR-MS-072	
		MHHS-BR-MS-073	
		MHHS-BR-MS-073.1	
	b) Please self-declare whether you have	MHHS-BR-MS-074	
	updated your systems and business	MHHS-BR-MS-075	
	processes to enable you to continue to	MHHS-BR-MS-083	
	meet the following non-functional requirements of ensuring that:	MHHS-BR-MS-091	
		MHHS-BR-DS-138	
	You maintain separate production and non-production environments All operating system, programming languages and their runtime libraries	MHHS-BR-DS-139.1	
		MHHS-BR-DS-139.2	
		MHHS-BR-DS-143.1	
	are at recommended supported	MHHS-BR-DS-144	
	versions	MHHS-BR-DS-157	
		MHHS-BR-RS-135	
		E2E0012	

4.6.2 Data Transfer Network (DTN)	- When you do have planned or unplanned outages that these are communicated to the DIP - You maintain an archive of all transactional data for 24 months - Services that interface with the DIP have an availability of 98% outside planned outage periods - You do not plan outages within the Secured Active processing window If you cannot self-declare you will meet these requirements, please confirm by when you expect to be able to make this self-declaration. a) How is your connection to the DTN maintained to send and receive flows? b) What systems do you use to send DTN flows and what automation steps do you have in place?	E2E0401 E2E0402 E2E0403 E2E0404 E2E1001 E2E1009B MHHS-BR-SU-137 MHHS-BR-SU-138 MHHS-BR-MS-081 MHHS-BR-MS-083 MHHS-BR-DS-149 MHHS-BR-DS-149 MHHS-BR-DS-157	
Network (DTN)	b) What systems do you use to send DTN flows and what automation steps do you have in place?	MHHS-BR-RS-143 MHHS-BR-MS-081 MHHS-BR-MS-083 MHHS-BR-DS-149	

4.6.3 Industry Standing Data (ISD)	What controls do you have in-place to ensure that ISD updates are captured within all relevant systems to support wider business processes?	MHHS-BR-SU-123 MHHS-BR-LD-059 MHHS-BR-MS-071 MHHS-BR-MS-071.1 MHHS-BR-DS- 069MHHS-BR-DS-139	
4.6.4 Electricity Enquiry Service (EES)	a) Will you require access to the Electricity Enquiry Service to receive up-to-date Electricity Market information, and if so, do you have the required access you need via the GUI and/or API? Else, will you make an application for the access you need?	MHHS-BR-SU-139 MHHS-BR-DS-156 MHHS-BR-MS-090	

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	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	For Question 5.1.1.1 A - Your response should include the following: • A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT.	MHHS-BR-SU-001 MHHS-BR-SU-004 MHHS-BR-SU-019 MHHS-BR-SU-048 MHHS-BR-SU-048.1	

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In line with MHHSP-	downstream systems and	This could be because, for	MHHS-BR-SU-049	
BP001, MHHSP-	processes; this may be	example, you have made changes		
BP002, MHHSP-	nothing). In the case that	to upstream, downstream, and/or		
BP003	changes have been made, how	interfacing systems which have not		
2. 000	have you tested these updated	been captured within the scope of		
	E2E business process (e.g.	the functional test scenarios and		
	E2E process changes tested in	scripts but will form part of the		
	own UIT environment)	wider business process		
	own on environment	·		
h)	What controls do you have in	requirements as defined in the BSC		
D)	What controls do you have in	and REC Codes. Additionally, this		
	place to monitor for missing or	may be because you are placing		
	erroneous DIP interfaces,	reliance on testing completed by		
	particularly regarding the IF001	other MHHS Participants for		
	and IF002 that should coincide	common systems, but the		
	with the CSS2370.	integration with your own end-to-		
		end solution has not yet been		
c)	,	tested.		
	capture all of the information			
	required in the Secure Data	Any instances where you have		
	Exchange Portal (SDEP)	opted out of receiving DIP		
	message requesting the DNO to	Publications, and how you will		
	establish a new metering point?	ensure you will receive this		
		information.		
		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 5.1.1.1 B - Your response should include the following points; • How you will obtain registration details for an Initial Registration, and maintain records accordingly • 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. For Question 5.1.1.1 C - Your response should include the following point; • 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/Limmetered		
		Direction, Metered/Unmetered Indicator, Market Segment		
5.1.1.2 Appointment with Change of Supplier In line with 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	 For Question 5.1.1.2 A - Your response should include the following: A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. Any instances where you have opted out of receiving DIP 	MHHS-BR-SU-002 MHHS-BR-SU-005 MHHS-BR-SU-006 MHHS-BR-SU-007 MHHS-BR-SU-008 MHHS-BR-SU-010 MHHS-BR-SU-011 MHHS-BR-SU-011	

have you tested these updated
E2E business process (e.g.
E2E process changes tested in
own UIT environment)

- b) What controls do you have in place to verify that a Qualified Data Service and/or Metering Service is appointed for the relevant Market Segment from the Registration Effective From Date (EFD)?
- c) What controls will you put in place to manage Supplier Agent activities to ensure the end-toend process is carried out within MHHS defined timescales. This includes:
 - a. Data Services activities e.g. sending Consumption data
 - b. **MEMMOA** activities e.g. sending MTDs
- d) How will you identify when you need to raise a dispute to switch meter reads given the amendments to the triggers for raising a dispute, the extension of the application to cover half hourly metering point?
- e) What controls do you have in place to ensure the end-to-end process is carried out within MHHS defined timescales as outlined in the Operational

Publications, and how you will ensure you will receive this information.

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

For Question 5.1.1.2 B - Your response should include the following:

 Method(s) to identify and appoint a Qualified Data Service and/or Metering Service to the relevant Market Segment, and ongoing monitoring controls to ensure the correct appointment is in place.

For Question 5.1.1.2 C - Your response should include the following:

Controls to ensure Supplier Agent Activities are carried out in line with MHHS defined timescales and messages are processed within 60 minutes of receipt, outlined in the operational choreography. Controls may include ongoing monitoring processes and follow-up

MHHS-BR-SU-013 MHHS-BR-SU-014 MHHS-BR-SU-015 MHHS-BR-SU-016 MHHS-BR-SU-017 MHHS-BR-SU-019 MHHS-BR-SU-059 MHHS-BR-SU-106 MHHS-BR-SU-107 MHHS-BR-SU-135 MHHS-BR-SU-136 MHHS-BR-SU-158 MHHS-BR-SU-159 MHHS-BR-SU-160

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	Choreography and baselined in the relevant codes?	communication where activities are delayed. Please refer to both: O Data Service activities	
1	f) How will you identify discrepancies between	MEMMOA activities	
	metering details received from SMRS with information from the Metering Service?	For Question 5.1.1.2 D - Your response should include the following:	
		Methods to identify raising a dispute to switch meter reads.	
		For Question 5.1.1.2 E - Your response should include the following:	
		Controls to ensure a dispute is identified, raised and resolved as early as possible.	
		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	

5.1.1.3 Appointment without Change of Supplier In line with MHHSP-BP002, MHHSP-BP003		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) Please note where controls are different to those in Q5.1.1.2.	 For Question 5.1.1.3 A - Your response should include the following: A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. 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. If there are no relevant additional changes to disclose for this business process, please write "N/A". 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. 	See Q2	
5.1.1.4 Change of Market Segment	a)	Excluding the functional elements tested in PIT/SIT/QT, what further changes have been	For Question 5.1.1.4 A - Your response should include the following:	MHHS-BR-SU-021.1 MHHS-BR-SU-022 MHHS-BR-SU-097	

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In line with MHHSP- BP011		made to the E2E business process? (e.g. to inputs, workflows, integrations, and downstream systems and processes; this may be	•	A dis and p been as ab
		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)	•	Any i opted Publi ensu
	b)	How will you liaise with the customer, LDSO and Metering Service as appropriate to coordinate the change and	•	How even chan syste enab

c) What controls do you have in place to ensure that you identify when new service providers are required?

agree a target work date?

- isclosure of changes to systems processes which have not n tested as part of PIT/SIT/QT, above.
- instances where you have ed out of receiving DIP lications, and how you will ure you will receive this rmation.
- you will gain assurance that n with these additional nges, your wider end-to-end tems and processes will still enable you to operate in line with your BSC and REC Code Requirements, as above.
- If there are no relevant additional changes to disclose for this business process, please write "N/A".

For Question 5.1.1.4 B - Your response should include the following:

- Process in place to coordinate and conduct a change of Market Segment with the appropriate parties.
- 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

MHHS-BR-SU-098 MHHS-BR-SU-099 MHHS-BR-SU-100 MHHS-BR-SU-101 MHHS-BR-SU-102 MHHS-BR-SU-103 MHHS-BR-SU-104 MHHS-BR-SU-105 MHHS-BR-SU-108 MHHS-BR-SU-109 MHHS-BR-SU-019

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		liaise with the Metering Service/LDSO to provide a prompt update. For Question 5.1.1.4 C - Your response should include the following: • Any controls in place to identify when a new service provider is required following a change of Market Segment		
5.1.1.5 Identifying Faults	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) b) How are you notified of any faults? c) Where applicable how do you notify the UMSDS of any faults?	 For Question 5.1.1.5 A - Your response should include the following: A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. 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. If there are no relevant additional changes to disclose for this business process, please write "N/A". 	MHHS-BR-SU-132 MHHS-BR-SU-133 MHHS-BR-SU-134	

			For Question 5.1.1.5 B - Your responshould include the following: Your chosen method(s) to be notified of any faults to metering equipment. This may be via the D0001 flow, or any other bilaters agreed method. For Question 5.1.1.5 C - Your responshould include the following: Your chosen method(s) to notify the UMSDS of any faults.	ally nse	
5.1.1.6 Disconnections In line with MHHSP-BP007	eleme what I made proce workfi down proce nothir chang have	ding the functional ents tested in PIT/SIT/QT, further changes have been to your E2E business ess? (e.g. to inputs, flows, integrations, and esses; this may be eng). In the case that ges have been made, how you tested these updated business process (e.g. brocess changes tested in UIT environment)	 For Question 5.1.1.6 A - Your responshould include the following: A disclosure of changes to systemate and processes which have not been tested as part of PIT/SIT/Cas above. Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. 	MHHS-BR-SU-054 MHHS-BR-SU-055 MHHS-BR-SU-056	
	do yo that w discor Admir is reco	systems and processes u have in place to ensure when confirmation of nnection of a Meter Point nistration Number (MPAN) eived that records are ained accordingly?	How you will gain assurance the even with these additional changes, your wider end-to-end systems and processes will still enable you to operate in line wit your BSC and REC Code Requirements, as above.		

c)	What controls do you have in place to ensure the disconnection is correct before continuing?	If there are no relevant additional changes to disclose for this 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:		
		Processes in place to receive notifications of disconnected MPANs and how records of disconnections will be stored and maintained.		
		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:		
		The chosen method(s) to raise any issues identified following completion of an erroneous disconnection to amend or reverse the disconnection.		

5.1.1.7 Change of Energisation Status	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) 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?	 For Question 5.1.1.7 A - Your response should include the following: A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. 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. If there are no relevant additional changes to disclose for this business process, please write "N/A". For Question 5.1.1.7 B - Your response should include the following: 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 	MHHS-BR-SU-053 MHHS-BR-SU-060 MHHS-BR-SU-061 MHHS-BR-SU-062 MHHS-BR-SU-064 MHHS-BR-SU-065	
5.1.1.8 Unmetered Supply (UMS) Exemption		ou wish to apply for the emptions for UMS please fill in			

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	the below and provide evidence on	When appointing sites, any controls
(If applicable)	how your controls work in practice:	in place to ensure you are Qualified to be appointed.
	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	For Overtice F 4.4.0.C. Very recorded
	registration?	For Question 5.1.1.8 C - Your response
	a) Mhat controls do you have	should include the following:
	c) What controls do you have in place to identify where	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 Sites, please provide your	should include:
	clear and detailed plan on	
	how you intend to de-	The plan should be clear and
	register these sites and to	detailed explaining how you intend 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	For Question 5.1.1.8 E - Your response
	qualification.	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.

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5.1.1.9 Migration Requirements	r s c	What controls do you have in- place to ensure you meet the specific registration and appointment requirements during a migration?	For Question 5.1.1.9 A - Your response should include the following: a) What controls will you have in place when you are the incoming Supplier to differentiate whether an MPAN is legacy, and if so how will you decide whether to migrate the MPAN as part of the Change of Supplier or Change of Agent process Additionally, how will you ensure the effective from date for CoA appointments is at least 1 day5 working days in the future from the transmission date of the IF-031. Furthermore, how will you ensure you do not have open IF-031's which are left unresponded to by Agents beyond appointment effective from dates. Finally, what controls do you have in place to ensure you will not attempt to change the Market Segment of an MPAN as part of the Migration.	MHHS-Migration-CoS-SUP-001 MHHS-Migration-CoS-SUP-002 MHHS-Migration-CoS-SUP-003 MHHS-Migration-CoA(MS)-SUP-004 MHHS-Migration-CoA(MS)-SUP-005 MHHS-RMigration-CoS-SUP-001 MHHS-RMigration-CoS-SUP-002 MHHS-RMigration-CoS-SUP-003 MHHS-RMigration-CoA(MS)-SUP-003 MHHS-RMigration-CoA(MS)-SUP-004 MHHS-Migration-CoA(MS)-SUP-004 MHHS-Migration-CoA(MS)-SUP-002 MHHS-Migration-Mis-SUP-002 MHHS-Migration-Mis-SUP-002 MHHS-Migration-Mis-SUP-002 MHHS-Migration-Mis-SUP-002 MHHS-Migration-Mis-SUP-003
5.1.1.10 Operational Requirements	6	a) What controls do you have in place to ensure that you meet all of your requirements as outlined in the Operational Choreography Version 5.4?	For Question 5.1.1.10 A - Your response should include the following: Both preventative controls and detective controls, which could include your monitoring activities and processes for manual intervention.	OPC_120 OPC_140 OPC_190 OPC_200 OPC_210 OPC_220 OPC_220 OPC_280 OPC_300 OPC_320A

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		How you will ensure you meet specific processing and response SLAs (these may be referenced in your answers above) How you will ensure you meet your operational requirements which may not have been tested during functional testing, such as OPC_320A to make data available to other parties (as applicable) by 06:00hrs the next Working Day after receiving a notification of disconnection.	OPC_320B OPC_340 OPC_390B OPC_400 OPC_420 OPC_440 OPC_490 OPC_510 OPC_530	
5.1.1.11 Additional BMU Mapping	a) When processing a new or changed ABMU, how do you identify whether the relevant MPANs are Settling as MHHS migrated MPANs and where they are identified as such how do you ensure MDS is notified?	For Question 5.1.1.11 - Your response should include the following: Both processes and controls to identify where a new or changed MPAN ABMU mapping and identify whether the MPAN(s) is/are on Half Hourly or Legacy Settlement. Processes to notify BSC Central Systems of this change, together with the Effective From Settlement Date, via the D0297 where the Metering System is Registered in the MHHS Arrangements.	MHHS-BR-SU-166 MHHS-BR-SU-168	

Data Management

Data Management Area	Questions	Guidance Points	MHHS requirements	Participant Responses
5.1.2.1 Amendment of Existing Appointment Conditions	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? b) How will you identify when an appointment amendment is	For Question 5.1.2.1 A - Your response should include the following: 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.	MHHS-BR-SU-031 MHHS-BR-SU-032 MHHS-BR-SU-033 MHHS-BR-SU-034 MHHS-BR-SU-035 MHHS-BR-SU-036	
	c) What controls do you have in place to monitor and review rejected appointment amendments, and where appropriate to resubmit with the required information?	For Question 5.1.2.1 B - Your response should include the following: • Processes to determine when an existing Service Provider appointment requires an amendment.		
		For Question 5.1.2.1 C - Your response should include the following: • Processes to publish a Supplier		
		Service Appointment Request for a proposed Service Provider amendment via the DIP. Processes to receive, monitor and review rejected appointment amendment requests, and where required.		

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		how you will re-issue the request.		
5.1.2.2 Consumption Amendment	 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? 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. 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. 	For Question 5.1.2.2 A - Your response should include the following: • Where there has been an amendment to consumption, any controls in place to ensure all updates are identified and maintained accurately within relevant systems. For Question 5.1.2.2 B - Your response should include the following: • Processes to determine when an override read is required. Please refer to how you will ensure consumption is only amended pre-RF. For Question 5.1.2.2 C - Your response should include the following: • Processes to determine where a dispute needs to be raised if a consumption amendment is required post-RF. Your response should include how you will check that the Consumption Amendment is over the minimum materiality criteria for any pre-RF amendments.	MHHS-BR-SU-111 MHHS-BR-SU-112 MHHS-BR-SU-116 MHHS-BR-SU-117	

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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?	For Question 5.1.2.3 A - Your response should include the following: • 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. • 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.	MHHS-BR-SU-030 MHHS-BR-SU-030
5.1.2.4 Registration Data	a)	What controls do you have inplace to ensure that updates are captured within all relevant systems to support wider business processes? (this is relevant to: • Supplier-owned registration data such as IHD, SMSO, and Profile Class/SSC • Non-supplier owned registration data such as Meter Point Location (MPL) address, GSP Group ID, Energy Direction, Metered Status, DUoS Tariff ID)	For Question 5.1.2.4 A - Your response should include the following: • Where there have been updates to registration data, any controls in place to ensure all changes are captured and maintained accurately within relevant systems. Please refer to both: a. Supplier-owned registration data, and b. Non Supplier-owned registration data in your 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-084 MHHS-BR-SU-085 MHHS-BR-SU-086 MHHS-BR-SU-087 MHHS-BR-SU-088 MHHS-BR-SU-089 MHHS-BR-SU-090 MHHS-BR-SU-091 MHHS-BR-SU-092 MHHS-BR-SU-093 MHHS-BR-SU-096.1

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				MHHS-BR-SU-096.2	
				MHHS-BR-SU-096.3	
5.1.2.5 Related	a)	,	For Question 5.1.2.5 A - Your	MHHS-BR-SU-081	
Meter Point Data		place to ensure that interface	response should include the	MHHS-BR-SU-083	
		data updates are captured	following:	MHHS-BR-SU-131	
		within the relevant systems to			
		support wider business	Where you have obtained		
		processes for in scope services in line with the BSC and REC	updates to Related Meter Point		
		obligations brought about by	Data, any controls in place to ensure all records are		
		MHHS?	maintained completely and		
			accurately in relevant systems.		
	b)	How will you identify related			
	′	MPANs, as well as identify any	For Question 5.1.2.5 B - Your		
		changes required to the	response should include the		
		Metering Point Relationships in	following:		
		the Registration Services?			
			Processes to identify related		
	c)	What controls do you have in	MPANs, including processes to		
		place to ensure that the appointment requests are only	determine where changes are		
		initiated by the Primary	required to the Metering Point Relationships in the		
		Metering Points but to ensure	Registration Services.		
		any data relating to the	registration dervices.		
		Secondary Metering Points is	For Question 5.1.2.5 C - Your		
		updated accordingly?	response should include the		
			following:		
			g -		
			Controls to ensure that any		
			appointment requests are only		
			received from Primary Metering		
			Points. Your response should		
			also include how you will ensure		
			any changes to data relating to		
			Secondary Metering Points is updated accurately and		
			maintained within all relevant		
			systems.		
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5.1.2.6 Import/Export MPANs	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 where changes are needed to Import/Export associations?	For Question 5.1.2.6 A - Your response should include the following: • How you will obtain Import/Export linkage updates and maintain records accordingly in all relevant systems. For Question 5.1.2.6 B - Your response should include the following: • 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.	MHHS-BR-SU-094 MHHS-BR-SU-096
5.1.2.7 Meter Technical Details (MTDs)	a)	What controls do you have in- place to ensure that interface data updates are captured within the relevant systems to support wider business processes for in scope services in line with the BSC and REC obligations brought about by MHHS?	For Question 5.1.2.7 A - Your response should include the following: • 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.	MHHS-BR-SU-050 MHHS-BR-SU-052 MHHS-BR-SU-066 MHHS-BR-SU-067 MHHS-BR-SU-068 MHHS-BR-SU-070 MHHS-BR-SU-071 MHHS-BR-SU-072 MHHS-BR-SU-073

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b)	How will you identify discrepancies between metering details received from Supplier Meter Registration Service (SMRS) with information from the Metering Service?	For Question 5.1.2.7 B - 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.	MHHS-BR-SU-132 MHHS-BR-SU-133	
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Business Processes

Business Process Area	Questions	Guidance Points	MHHS requirements	Participant Responses
5.2.1.1 MEMMOA and/or Data Services Appointments. In line with 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, 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) 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?	 For Question 5.2.1.1 A - Your response should include the following: 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. Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. 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 	MHHS-BR-LD-002 MHHS-BR-LD-003	

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		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 5.2.1.1 B - Your response should include the following: • Methods (manual or automated) to identify any discrepancies between appointments notified by the DIP and data received from the Metering Service via the DTN • How discrepancies will be investigated, flagged to the appropriate parties, and the process taken to subsequently resolve		
5.2.1.2 Change of Connection Type In line with MHHSP- BP011B	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)	 For Question 5.2.1.2 A - Your response should include the following: A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. 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. 	MHHS-BR-LD-047 MHHS-BR-LD-048 MHHS-BR-LD-049 MHHS-BR-LD-050 MHHS-BR-LD-051	

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- b) What processes and controls do you have in place to ensure you meet the new operational choreography updated requirements 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 MEMSupplier?
- c) How will you agree a target date with the Supplier and ensure you complete the work on the agreed target date?
- d) What controls do you have in place to identify when an existing connection type is inaccurate and ensure any queries are resolved?

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

For Question 5.2.1.2 B - Your response should include the following:

- Agreed method(s) of coordinating the target work date with the Supplier and your operatives
- Agreed method(s) of receiving a request from the Registration Service from the LDSO to change the Connection Type and processing that request within the required timescales, notifying the Registration Service within the required timescales.

For Question 5.2.1.2 C - Your response should include the following:

- Following a request to change the Connection Type, how you will agree a date with the Supplier for completion of work.
- Processes to action the change of Connection Type, including scheduling works with your operatives the MEM and ensuring the works have been completed as and when expected.

For Question 5.2.1.2 D - Your response should include the following:

- 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
- 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	
5.2.1.3 Disconnections 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, 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) 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.	 For Question 5.2.1.3 A - Your response should include the following: A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. 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. If there are no relevant additional changes to disclose for this business process, please write "N/A". For Question 5.2.1.3 B - Your response should include the following: 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 where required. Process in place to raise an issue with the relevant agent if a disconnection is incorrectly carried out. 	MHHS-BR-LD-015 MHHS-BR-LD-016 MHHS-BR-LD-017 MHHS-BR-LD-018 MHHS-BR-LD-019 MHHS-BR-LD-020 MHHS-BR-LD-020.1

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5.2.1.4 Change of	a)	Excluding the functional elements	For Question 5.2.1.4 A - Your response should	MHHS-BR-LD-022	
Energisation Status	,	tested in PIT/SIT/QT, what further	include the following:	MHHS-BR-LD-023	
		changes have been made to your	_	MHHS-BR-LD-024	
In line with MHHSP-		E2E business process? (e.g. to	A disclosure of changes to systems and	MHHS-BR-LD-025	
BP008		inputs, workflows, integrations, and downstream systems and processes, even where DIP	processes which have not been tested as part of PIT/SIT/QT, as above.	MHHS-BR-LD-026	
		optionality has been exercised; this may be nothing). In the case that changes have been made, how have you tested these updated	Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information.		
		E2E business process (e.g. E2E process 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		
	b)	Once a change of energisation request has been processed, what	enable you to operate in line with your BSC and REC Code Requirements, as above.		
		controls do you have in place to ensure that accurate meter reads are received from the Metering or Data Service, where appropriate?	If there are no relevant additional changes to disclose for this business process, please write "N/A".		
			For Question 5.2.1.4 B - Your response should include the following:		
			Method(s) (automated or manual) to process a change of energisation request. Your response should include processing the IF-008 within 60 minutes.		
			Controls in place to ensure complete and accurate meter readings are received from the Metering or Data Service and processed in a timely manner		

5.2.1.5 New Connections In line with MHHSP- BP001	tested chang E2E b inputs downs proces option may b chang have y E2E b	ding the functional elements in PIT/SIT/QT, what further ges have been made to your pusiness process? (e.g. to s, workflows, integrations, and stream systems and isses, even where DIP nality has been exercised; this be nothing). In the case that ges have been made, how you tested these updated pusiness process (e.g. E2E less changes tested in own UIT comment)	 For Question 5.2.1.5 A - Your response should include the following: A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. How you will gain assurance that even with these additional changes, your wider endto-end systems and processes will still enable you to operate in line with your BSC and REC Code Requirements, as above. If there are no relevant additional changes to disclose for this business process, please write "N/A". 	MHHS-BR-LD-010 MHHS-BR-LD-010.1 MHHS-BR-LD-011 MHHS-BR-LD-012	
5.2.1.6 Operational Requirements	to ens	controls do you have in place sure that you meet all of your rements as outlined in the ational Choreography Version	 For Question 5.2.1.6 A - Your response should include the following: Both preventative controls and detective controls, which could include your monitoring activities and processes for manual intervention. How you will ensure you meet specific processing and response SLAs (these may be referenced in your answers above) How you will ensure you meet your operational requirements which may not have been tested during functional testing, such as OPC_320A to make data available to other parties (as applicable) by 06:00hrs the next Working Day after receiving a notification of disconnection. 	OPC_130 OPC_160 OPC_160 OPC_180 OPC_200 OPC_250 OPC_270 OPC_280 OPC_290 OPC_300 OPC_310A OPC_310B OPC_320A OPC_320B OPC_320B OPC_330 OPC_410 OPC_420 OPC_430B	

	ODC 440	
	OPC_440	
	OPC_480	
	OPC_490	
	OPC_500A	
	OPC_500B	
	OPC_510	
	OPC_520	

Data Management

Data Management Area	Questions	Guidance Points	MHHS requirements	Participant Responses
5.2.2.1 Meter Technical Details (MTDs)	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?	 For Question 5.2.2.1 A - Your response should include the following: The chosen method(s) (automated or manual) to receive MTDs from the Metering Service How records of MTDs will be held within your system. Controls in place to ensure updates to MTDs are actioned appropriately and updated in your system in a timely manner 	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	a) What controls do you have inplace to ensure that updates are captured within all relevant systems to support wider business processes? (this is relevant to: - MPL Address, GSP Group ID, Metered Status, Domestic Premises Indicator, Energy Direction, Related MPAN, Import/Export Link) b) What controls do you have in place to maintain Distribution Use	For Question 5.2.2.2 A - Your response should include the following: The chosen method(s) (automated or manual) to receive Registration Data from the Registration Service How records of Registration Data will be held within your system Controls in place to ensure updates to Registration Data are actioned appropriately and updated in your system in a timely manner.	MHHS-BR-LD-033 MHHS-BR-LD-034 MHHS-BR-LD-035 MHHS-BR-LD-036 MHHS-BR-LD-037 MHHS-BR-LD-043 MHHS-BR-LD-043.1 MHHS-BR-LD-043.2 MHHS-BR-LD-043	

	of System (DUoS) Tariff IDs in line with their Charging Method Statement. c) How will you manage and process requests to update the Metered Indicator and ensure records are updated accordingly?	For Question 5.2.2.2 B - Your response should include the following: Controls in place to maintain DUoS Tariff IDs in line with their Charging Method Statement e.g., ongoing monitoring. You should also include your processes for flagging and resolving any discrepancies between DUoS Tariff IDs and their corresponding Charging Method Statements. For Question 5.2.2.2 C- Your response should include the following: Whether the applicant processes a change of metered indicator in compliance with the relevant requirements or whether they use a workaround. If the latter, the applicant should detail that workaround and how it is compliant to the BSC		
5.2.2.3 Consumption Data	What controls do you have in- place to ensure that interface data updates are captured within the relevant systems to support wider business processes for in scope services in line with the BSC and REC obligations brought about by MHHS?	For Question 5.2.2.3 A Your response should include the following: Process(es) (automated or manual) to obtain and process validated UTC Period Level Consumption Data from the Data Service via the DIP Controls to ensure all updates to Consumption Data are updated completely and accurately within your system.	MHHS-BR-LD-007 MHHS-BR-LD-008 MHHS-BR-LD-009.1 MHHS-BR-LD-029	

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Business Processes

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)	 For Question 5.3.1.1 A - Your response should include the following: 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. Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. 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 	MHHS-BR-RS-005 MHHS-BR-RS-006 MHHS-BR-RS-007 MHHS-BR-RS-008	

⁴ Known under the REC as the Electricity Retail Data Service (ERDS)

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		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".	
F F C C C C	What controls do you have in place to ensure the end-to-end process is carried out within MHHS defined timescales as outlined in the Operational Choreography and baselined in the relevant codes?	 For Question 5.3.1.1 B - Your response should include the following: How is your system configured to receive and process the change of supply pending notification? Once a COS pending notification has been received, how do you ensure that you publish the initial registration details for the MPAN to the Supplier? What is your process to receive and process the COS secured notification from the CSS? Once a COS secured notification has been received, how do you ensure that the Change of Supplier event is pushed to the Supplier and LDSO providing the new Supplier and registration details? 	

5.3.1.2	
Appointments	

In line with MHHSP-BP002

- 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)
- b) What controls do you have in place to validate appointment requests for a proposed Metering Service and Data Service? (please note if this varies for on the day, retro or prospective appointments, as well as for related MPANs and import/export links)
- b)c)What controls do you have in place to ensure Appointment updates are sent to CSS in the correct order when multiple agents are being appointed at the same time?

For Question 5.3.1.2 A - Your response should include the following:

- A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above.
- Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information.
- 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.
- If there are no relevant additional changes to disclose for this business process, please write "N/A".

For Question 5.3.1.2 B - Your response should include the following:

- 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).
- How do you determine which path the proposed metering service will be processed on once accepted? Explain any how you determine each of the below processes to work.

MHHS-BR-RS-009 MHHS-BR-RS-010 MHHS-BR-RS-020 MHHS-BR-RS-024.1 MHHS-BR-RS-033.1 MHHS-BR-RS-048.1 MHHS-BR-RS-052 MHHS-BR-RS-071

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		 "On the day" (Service Appointment start date = processing date AND existing supplier = requesting supplier) "Retro" (Service Appointment start date = Previous Service Appointment End Date +1 AND Service Appointment start date processing date AND Existing Supplier = Requesting Supplier "Prospective" (All other appointments) How do you ensure that upon a retrospective change of Metering Service appointment you re-publish a Registration service notification of Deappointment on the DIP? For Question 5.3.1.2 C - Your response should include the following: How will you ensure that when agents for multiple roles are being updated at the same time (e.g. Data Services and MOA), hence require separate messages from the Registration Services to CSS, that these messages are sent to CSS in the correct order? 		
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	For Question 5.3.1.3 A - Your response should include the following: A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above.	MHHS-BR-RS-089 MHHS-BR-RS-091	

	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)	Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. 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. If there are no relevant additional changes to disclose for this business process, please write "N/A".		
Disconnections In line with MHHSP-BP007	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) What controls do you have in place to ensure the status is set to de-energised and you send a de-energised notification for any MPANs	 For Question 5.3.1.4 A - Your response should include the following: A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. 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. If there are no relevant additional changes to disclose for this business process, please write "N/A". 	MHHS-BR-RS-097 MHHS-BR-RS-102 MHHS-BR-RS-102.1	

where the energisation stat is currently energised within timely manner?		
c) How do you ensure the rea for disconnection as noted the de-appointment notifications is accurate?		
	For Question 5.3.1.4 B - Your response should include the following:	
	How do you receive notification of disconnection from the LDSO? (please outline systems and communication methods)	
	For Question 5.3.1.4 C - Your response should include the following:	
	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-008 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 Energisation Status In line with MHHSP-BP008	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)	 For Question 5.3.1.5 A - Your response should include the following: A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. 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. If there are no relevant additional changes to disclose for this business 	MHHS-BR-RS-105 MHHS-BR-RS-106	

	appropriate action should validation fail?	For Question 5.3.1.5 B - Your response should include the following: • 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? • For any validation failures how do you ensure that you reject the energisation status change request, with the failure reason to the Metering Service? • For any valid requests how do you ensure that you update the Registration Service system and publish acceptance of the update on the DIP?		
5.3.1.6 Change of Connection Type/Market Segment In line with MHHSP- BP011B	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	 For Question 5.3.1.6 A - Your response should include the following: A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. How you will gain assurance that even with these additional changes, your 	MHHS-BR-RS-123.1 MHHS-BR-RS-124 MHHS-BR-RS-124.1 MHHS-BR-RS-124.2 MHHS-BR-RS-127	

	process (e.g. E2E process changes tested in own UIT environment) b) 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?	wider end-to-end systems and processes will still enable you to operate in line with your BSC and REC Code Requirements, as above. • If there are no relevant additional changes to disclose for this business process, please write "N/A". For Question 5.3.1.6 B - Your response should include the following: • What controls will you have in place to ensure your systems and/or processes will be able to identify unmetered sites? • If your systems and/or processes identify an incorrect market segment, how will you update this?		
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 changes tested in own UIT environment)	 For Question 5.3.1.7 A - Your response should include the following: A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. 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. 	MHHS-BR-RS-078 MHHS-BR-RS-078.1 MHHS-BR-RS-078.2 MHHS-BR-RS-079 MHHS-BR-RS-080	

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		If there are no relevant additional changes to disclose for this business process, please write "N/A".	
5.3.1.8 Migration Requirements	a) What controls do you have in-place to ensure you meet the specific registration requirements during a migration?	For Question 5.3.1.8 A - Your response should include the following: • 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. • 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. • 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. • 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.	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-008 MHHS-RMigration-CoS-RS-008 MHHS-RMigration-CoS-RS-008 MHHS-RMigration-CoA(MS)-RS-001 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

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? (this is relevant to: MPL Address, GSP Group ID, Metered Status, Domestic Premises Indicator, Energy Direction, Related MPAN, Import/Export links, DUoS Tariffs)	 For Question 5.3.2.1 A - Your response should include the following: The chosen method(s) (automated or manual) to receive Registration Data from the Registration Service How records of Registration Data will be held within your system Controls in place to ensure updates to Registration Data are actioned appropriately and updated in your system in a timely manner. 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? 	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-085 MHHS-BR-RS-086 MHHS-BR-RS-086.1 MHHS-BR-RS-087 MHHS-BR-RS-088.1 MHHS-BR-RS-088.2 MHHS-BR-RS-088.3 MHHS-BR-RS-088.4 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	in-place to ensure that interface data updates are captured within the relevant	response should include the following:	MHHS-BR-RS-078.2 MHHS-BR-RS-079	
	systems to support wider business processes for in scope services in line with the BSC and REC obligations brought about by MHHS?	The chosen method(s) (automated or manual) to receive MDR updates from the Central Switching Service		
	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	How records of MDR appointments will be held within your systems Controls in place to ensure updates to MDR Appointments are updated in your systems in a timely manner		
	flag against the appointment records with the most recent CSS update outcome?	 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?		

For Question 5.3.2.2 B - Your response should include the following: • Controls in place to verify whether MDR appointment records in CSS are up to date, or whether an update needs to be sent.
What notifications do you receive to identify a CSS update and how is the EDRSERDS interface updated?

5.4 Unmetered Supplies Operator

Business Processes

Business Process	Questions	Guidance Points	MHHS	Participant Responses
Area			requirements	
	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) b) How will you send the Submeter ID, Locations, Latitude/longitude information and PECU Arrays locations? c) How do you receive the notification from the Registration Service and any supporting information confirming the UMSO appointment or de-	For Question 5.4.1.1 A - Your response should include the following: • 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 endto-end solution has not yet been tested.	_	Participant Responses
	appointment? d)	Any instances where you have opted out of receiving DIP Publications, and how you will	030.1	

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ensure you will receive this information. 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 5.4.1.1 B – The response should address the following areas: 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. For Question 5.4.1.1 C – The response should address the following areas: • The process and/or systems used to receive a new MEM **UMSO** appointment and MPAN

details from the Registration

		Service, and how these records are maintained within your system. • If there are any changes between your appointment and de-appointment, please detail where this is differs.		
5.4.1.2 Disconnections 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 E2E business process (e.g. E2E process changes tested in own UIT environment) b) How do you receive notification of a disconnection request and what automated or manual interactions are required to process the notification? c) How do you request the LDSO to carry out the disconnection once the Supply Point has been de-energised and the inventory updated?	 For Question 5.4.1.2 A - Your response should include the following: A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. 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. If there are no relevant additional changes to disclose for this business process, please write "N/A". 	MHHS-BR-MS- 038 MHHS-BR-MS- 040	

		For Question 5.4.1.2 B – The response should address the following areas: • An outline of how your system is configured to receive and process disconnection requests from the Supplier, LDSO or customers, including if this process differs from different requestors. • Upon receipt of the disconnection request, any user/manual interactions required to trigger a request to the LDSO to carry out disconnection For Question 5.4.1.2 C – The response should address the following areas: • 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	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	For Question 5.4.1.3 A – Your response should include the following: • A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above.	MHHS-BR-MS- 036 MHHS-BR-MS- 037 MHHS-BR-MS- 041 MHHS-BR-MS- 042	

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changes have been made, how
have you tested these updated
E2E business process (e.g.
E2E process changes tested in
own UIT environment)

- b) Hhow 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?
- c) What actions are taken upon receipt of a request to the change of energisation status?

- Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information.
- 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.
- If there are no relevant additional changes to disclose for this business process, please write "N/A".

For Question 5.4.1.3 B – The response should address the following areas:

• 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.

For Question 5.4.1.3 C – The response should address the following areas:

MHHS-BR-MS-042.1 MHHS-BR-MS-047 MHHS-BR-MS-048 MHHS-BR-MS-049 MHHS-BR-MS-050

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		Upon receipt of a request to change energisation status any user/manual interactions required to complete the change. The process in place to update the Unmetered Supplies Inventory in line with the energisation change, as set out in the UMSO Method Statement. 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.		
5.4.1.4 New Connections 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; 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) b) How do you request the LDSO to set up an MPAN in Central Switching Service (CSS) for a new connection?	For Question 5.4.1.4 A – Your response should include the following: A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. 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.	MHHS-BR-MS- 033	

	connection request is appropriate?	 If there are no relevant additional changes to disclose for this business process, please write "N/A". For Question 5.4.1.4 B – The response should address the following areas: An outline of how requests to the LDSO to set up an MPAN in CSS for a New Connection are sent. Validation checks in place to ensure any information sent to the LDSO regarding the new MPAN is complete and accurate. For Question 5.4.1.4 C – The response should address the following areas: Validation checks in place to ensure any information relating to a New Connection for a 		
		unmetered supply is valid and complete.		
5.4.1.5 Fault Resolution	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	For Question 5.4.1.5 A – Your response should include the following: • A disclosure of changes to systems and processes which	MHHS-BR-MS- 080	

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)

- b) How do you receive fault notifications from the Unmetered Supplies Data Service (UMSDS)?
- c) What actions are taken when fault notifications are received?
- d) How are faults monitored and tracked?

have not been tested as part of PIT/SIT/QT, as above.

- Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information.
- 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.
- If there are no relevant additional changes to disclose for this business process, please write "N/A".

For Question 5.4.1.5 B – The response should address the following areas:

 How your system is configured to receive fault notifications from 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.		
5.4.1.6 Migration Requirements	A) How will you coordinate with the Supplier during the migration of an Unmetered site, ensuring seamless communication outside of any messages or interfaces?	For Question 5.4.1.6 A – Your response should include the following: • Supplier should communicate directly with both the new and outgoing Agents to plan the moter-MPAN transfer. This coordination should happen independently of market messaging or interfaces to ensure a smooth transition and alignment of responsibilities for meter migration.	MHHS-Migration- UNM-MS-001	
5.4.1.7 Operational Requirements	a) What controls do you have in place to ensure that you meet all of your requirements as outlined in the Operational Choreography?	For Question 5.1.1.10 A5.4.1.7A Your response should include the following: • Both preventative controls and detective controls, which could include your monitoring activities and processes for manual intervention. How you will ensure you meet specific processing and response SLAs (these may be referenced in your answers above) • How you will ensure you meet your operational requirements	OPC_120 OPC_140 OPC_140 OPC_150 OPC_175 OPC_190 OPC_200 OPC_210 OPC_220 OPC_220 OPC_280 OPC_300 OPC_320 -OPC_320A OPC_320B	

	which may not have been tested during functional testing, such as OPC_320A to make data available to other parties (as applicable) by 06:00hrs the next Working Day after receiving a notification of disconnection.	OPC_400	
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Data Management

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

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5.4.2.2.2 Registration Data , Data ,	a) What controls do you have inplace to ensure that updates are captured within all relevant systems and aligned with the LDSO to support wider business processes? (this is relevant to: MPL Address, GSP Group ID, Metered Status, Energy Direction, Import/Export links)	Codes, Switch Regimes and Combination. Processes to ensure the combinations are valid. For Question 5.4.2.2.2 A - Your response should include the following: The chosen method(s) (automated or manual) to receive Registration Data-from the Registration Data-from the Registration Data will be held within your system Controls in place to ensure updates to Registration Data are actioned appropriately and updated in your system in a timely manner. 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?	MHHS-BR-MS-064 MHHS-BR-MS-066.2 MHHS-BR-MS-066.3 MHHS-BR-MS-066.5 MHHS-BR-MS-066.6
Direct Contracts Contracts	place to ensure that interface data updates are captured	response should include the following:	MHHS-BR-MS-011
,0011114010,			
	within the relevant systems to	Tollowing.	MHHS-BR-MS-012
		Where there has been a change	MHHS-BR-MS-013 MHHS-BR-MS-014

in line with the BSC obligations brought about by MHHS?	any controls in place to ensure all updates are identified and maintained accurately within relevant systems. Processes to obtain Customer Direct Contract response and maintain records accordingly.	MHHS-BR-MS-016	
	Your response should also include how you will utilise this information in future requests for Data Service appointments for the notified MPANs.		

5.5 Advanced Data Services

Business Processes

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

Business Process	Questions	Guidance Points	MHHS	Participant Responses
Area			requirements	
5.5.1.1 Appointments/De-Appointments In line with 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. E2E process changes tested in own UIT environment) b) For advanced meters how will you collect the opening UTC period level data? c) Once de-appointed how will you collect the closing UTC period level data? d) How do you receive the notification from the Registration Service and any supporting information confirming the MEM-ADS appointment? 	For Question 5.5.1.1 A – Your response should include the following: • 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 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 endto-end solution has not yet been tested. • Any instances where you have opted out of receiving DIP Publications, and how you will	MHHS-BR-DS- 003 MHHS-BR-DS- 005 MHHS-BR-DS- 009MHHS-BR- DS-022 MHHS-BR-DS- 008.1 MHHS-BR-DS- 026.3 MHHS-BR-DS- 026.4 MHHS-BR-DS- 026.6 MHHS-BR-DS- 026.7 MHHS-BR-DS- 104 MHHS-BR-DS- 104 MHHS-BR-DS- 108	

e) What arrangements have you made for notifying third party service providers, and how will the mechanism for this notification be established?	ensure you will receive this information. 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 BSCCode 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: The process for deleting any metering details received where a proposed appointment has	
	Where an appointment has been accepted, how you will attempt to collect the UTC period level data from an advanced meter. Including, where remote access has not	

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been possible.

For Question 5.5.1.1 C – Your response should include the following:

- Once de-appointed, how you will collect the closing UTC period level data to use for final data processing. Including where remote or local access has not been possible.
- The process for storing valid register reads for use in the estimation process where no better data is available.

•

For Question 5.5.1.1 D - Your response should address the following:

The process and/or systems used to receive a new
 MEMADS appointment and MPAN details from the Registration Service, and how these records are maintained within your system.

For Question 5.5.1.1 E - Your response should address the following:

 Where you have any third-party service providers in place, what is the mechanism in which you are notifying them in line with the Appointment and/or deappointment process?

5.5.1.2 Identifying	a)	Excluding the functional	For Question 5.5.1.2 A – Your	MHHS-BR-DS-	
aults		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)	response should address the following: • A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. • Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information.	147	
	b)	The Advanced Data Service (ADS) needs to identify any faulty metering equipment and notify the Advanced Metering Service and the Supplier. What is your process for this?	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 Code Requirements, as above. If there are no relevant additional changes to disclose for this business process, please write "N/A".		

		For Question 5.5.1.2 B – Your response should address the following: • How you will send the notification (either in a system/portal or otherwise e.g. email) to the Supplier and Advanced Metering Service when there is a fault with the metering equipment • 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) will be provided to the Supplier upon investigation 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.		
5.5.1.3 Metering	a) How do you identify related MPANs or Import/Export linked meters? b) How do you receive/maintain all relevant Meter Technical Details? c) For Metering Systems where	For Question 5.5.1.3 A – Your response should include the following: • The process for identifying: • Related MPANs • Import/Export linked meters	MHHS-BR-DS- 045 MHHS-BR-DS- 117 MHHS-BR-DS- 119 MHHS-BR-DS- 123 MHHS-BR-DS-	
	you retrieve data from the Metering System, how have you demonstrated that your data	For Question 5.5.1.3 B – Your response should include the following:	134	

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retrieval systems (including
Hand Held Units and any third
party systems) are appropriate
to communicate with Metering
Equipment in accordance with
BSCP601?

- d) For Metering Systems that require proving tests what controls do you have in place to ensure that proving tests are performed in all the circumstances and timescales?
- e) How are the controls and processes implemented to ensure the aspects of Shared **SVA Meter Arrangements?**

How you ensure all MTDs have been received for both Related or Import/Export group MPANs

- The process for maintaining records of all MTDs, and where required, investigating any discrepancies with data received from the Registration Service
- 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

For Question 5.5.1.3 C - In your response:

 Please confirm that Protocol Approval for a Meter or Asset Meter Types has been achieved or where not, that the Elexon Metering Team have been contacted to apply for Protocol Approval.

For Question 5.5.1.3 D - In your response:

• The ADS agent is required to perform Proving Tests at the request of the SVA Meter Operator Agent. BSCP702 BSCP502 3.5 specifies the procedures to be used for different proving methods.

MHHS-BR-DS-MHHS-BR-DS-MHHS-BR-DS-148.1

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		BSCP502 BSCP702 Appendix 4.6 for SVA Metering Systems sets out, the circumstances in which a proving test will be required. For Question 5.5.1.3 E – In your response: Ensure accurate notification and recording of Primary and Secondary Supplier details along with their associated MSIDs. Confirm consistent SMRA registration details for each Shared SVA Meter arrangement, appointing only one MEMMOA and one Data Service. Maintain timely and accurate transfer of split Meter data allocations between each MSID		
5.5.1.4 Operational Requirements	a) What controls do you have in place to ensure that you meet all of your requirements as outlined in the Operational Choreography Version 5.4?	to the appropriate LDSOs. For Question 5.5.1.4 A - Your response should include the following: • Both preventative controls and detective controls, which could include your monitoring activities and processes for manual intervention. How you will ensure you meet specific processing and response SLAs (these may be referenced in your answers above)?	OPC_150 OPC_170A OPC_170B OPC_190 OPC_200 OPC_210 OPC_240 OPC_260 OPC_280 OPC_300 OPC_320A OPC_320B OPC_320B OPC_340 OPC_420	

Excluding the functional elements tested in PIT/SIT/QT, what further changes have been made to your EZE business processe; (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 EZE business process (e.g. EZE process changes tested in own UIT environment)			How you will ensure you meet your operational requirements which may not have been tested during functional testing, such as OPC_320A to make data available to other parties (as applicable) by 06:00hrs the next Working Day after receiving a notification of disconnection?	OPC_430A OPC_440 OPC_490 OPC_510	
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) b) What steps do you follow to obtain and maintain records of Registration Service Notification of Change of Energisation Status updates via the DIP? elements tested in PIT/SIT/QT, what further changes have been made to your 6 changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. 106 MHHS-BR-DS-108 MHHS-BR-DS-116 A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. 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 Code Requirements, as above.	5.5.1. <u>5</u> 40 Change of	a) Excluding the functional	For Question 5.5.1.95 A – Your	MHHS-BR-DS-	
readings when no valid readings are received from the Metering Service within 5 additional changes to disclose for this business process, please write "N/A".		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) b) What steps do you follow to obtain and maintain records of Registration Service Notification of Change of Energisation Status updates via the DIP? c) How do you ensure you have accurately estimated meter readings when no valid readings are received from the	response should address the following: A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. 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 Code Requirements, as above. If there are no relevant additional changes to disclose for this business process,	106 MHHS-BR-DS- 108 MHHS-BR-DS-	

working days of a change in	For Question 5.5.1.59 B – In your	
Energisation Status?	,	
Energisation Status:	response:	
d) How do you handle previously submitted UTC Period Level Consumption Data in settlements, upon notification of an energisation status change with no recorded consumption, especially when this change is retrospective?	When receiving the Registration Service Notification of Change of Energisation, what controls do you have in place to ensure that you keep and maintain a record of these notifications? For Question 5.5.1.59 C – In your response: How will you generate an estimated reading where no	
	reads are provided alongside a change in Energisation Status, and how you will ensure this is completed within the 5 working day SLA?	
	For Question 5.5.1.59 D – In your	
	response:	
	Processes for when a Change of Energisation notification has been received for a backdated date when there has been no recorded consumption.	

Data Management

Data Management	Questions	Guidance Points	MHHS	Participant Responses
Area			requirements	
5.5.2.1 Consumption Data	a) What controls do you have in- place to ensure that interface data updates are captured within the relevant systems to support wider business processes for in scope services in line with the BSC and REC obligations brought about by MHHS?	For Question 5.5.2.1 A – Your response should address the following: • When updates are received what automated and manual processes are in place to update the system in line with business processes.	MHHS-BR-DS- 072 MHHS-BR-DS- 074 MHHS-BR-DS- 076 MHHS-BR-DS- 079 MHHS-BR-DS-	
	b) How have you integrated the Advanced Validation & Estimation Method statement into your estimation procedures?	For Question 5.5.2.1 B – Your response should address the following activities, which should be completed in line with the Advanced Validation and Estimation Method statement:	082 MHHS-BR-DS- 083 MHHS-BR-DS- 086 MHHS-BR-DS-	
	c) When a new load shape is available how will you reprocess the previously submitted data?	There are several steps required in the Advance Validation & Estimation Method statement. How have these	088 MHHS-BR-DS- 091 MHHS-BR-DS-	
	d) How do you ensure you accurately obtain and maintain records of Override Reads sent by the Supplier via the DIP?	been incorporated into normal business processes? For Question 5.5.2.1 C –Your response should address the	160 MHHS-BR-DS- 166	
	e) What are the necessary steps for you to publish a Consumption Amendment rejection on the Data Integration Platform when validation fails?	As outlined in the Advanced Validation & Estimation Method, please describe your process for handling Load Shape Data, including how you receive this information and the procedures you follow to reprocess		

		previously submitted data in exceptional circumstances. For Question 5.5.2.1 D –Your response should address the following: • Process to include obtaining overriding reads and maintaining overriding reads which has been sent by the Supplier. For Question 5.5.2.1 E –Your response should address the following: • Processes to including details of the appropriate interfaces and specifying the types of rejection reasons that should be communicated	
5.5.2.2 Meter Technical Details (MTDs)	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?	For Question 5.5.2.2 A – Your response should address the following: • When updates are received what automated and manual processes are in place to update the system in line with business processes	MHHS-BR-DS- 005 MHHS-BR-DS- 006.1

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- b) How do you receive MTDs through different sources e.g. DTN and DIP?
- c) How do you investigate discrepancies when MTDs are received from the DIP?
- d) How will you process MTDs received from a metering 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. For Question 5.5.2.2 B – Your response should address the following:

 Aside from the DIP and DTN do you have arrangements with Metering Services to receive MTDs in a different way?

For Question 5.5.2.2 C – Your response should address the following:

 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?

For Question 5.5.2.2 D - Your response should address 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

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5.5.2.3 Meter Readings	(a) (b) (c)	readings received?	For Question 5.5.2.3 A – Your response should address the following: When meter readings are received from site visits or customer-provided readings, how are they validated? Please outline if there are any differences between the two methods. For Question 5.5.2.3 B – Your response should address the following: Processes and/or controls of previously obtained actual readings used to estimate reads For Question 5.5.2.3 C – Your response should address the following: Processes to investigate where meter reads cannot be obtained, and where this	MHHS-BR-DS- 049 MHHS-BR-DS- 098 MHHS-BR-DS- 098.1 MHHS-BR-DS- 111
			meter reads cannot be obtained, and where this process differs, with Smart meters (if any).	
5.5.2.4 Customer Direct Contract	a)	What controls do you have in- place to ensure that interface data updates are captured within the relevant systems to support wider business processes for in scope services in line with the BSC and REC obligations brought about by MHHS?	 For Question 5.5.2.4 A – Your response should include the following: Controls in place to ensure that any appointments and updates to Customer Direct Contracts are reflected in the Registration Services. Controls in place to identify when Customer Direct 	MHHS-BR-DS- 031 MHHS-BR-DS- 032 MHHS-BR-DS- 033 MHHS-BR-DS- 034 MHHS-BR-DS- 035

	Contracts need to be removed, and how you will ensure these are published in a timely manner.	MHHS-BR-DS- 036 MHHS-BR-DS- 037	
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5.6 Smart Data Services (SDS)

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

Business Processes

Business Process	Questions	Guidance Points	MHHS	Participant Responses
Area			requirements	
5.6.1.1 Meter Data Retriever (MDR)	a) Are you intending on undertaking User Entry Process (UEP) for MDR as defined in Section H1 of the Smart Energy Code (SEC)?	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.	MHHS-BR-DS- 010 MHHS-BR-DS- 011.1 MHHS-BR-DS-	
	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? b) What controls have you got in place to ensure that you are able to communicate with an MDR(which could be the	If you do not plan to qualify as an MDR, please include: The process for ensuring there is a qualified MDR (which could be the Supplier) in place for all DCC enrolled meters The chosen communication methods between the SDS and an MDR (which could be be the Supplier).	MHHS-BR-DS- 009 MHHS-BR-DS- 019 MHHS-BR-DS- 041 MHHS-BR-DS- 130 MHHS-BR-DS- 132 MHHS-BR-DS- 132	
	Supplier)r? c) What processes do you have in place to ensure that you can carry out, when required, a change of MDR? d) If applicable, how will you notify/terminate third party service providers, such as the Meter Reading Service and Meter Data Retrieval Service,	For Question 5.6.1.1 C – Your response should include the following: • Where a Change of MDR is needed, what are your processes and controls to ensure that this is carried out correctly. For Question 5.6.1.1 D – Your response should include the following: • This could include methods like email, API calls, or secure FTP. The notification		

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	according to the agreed bilateral mechanism? e) Can you explain how you, your MDR or supplier collecting data for you will manage smart meter data request rejections via the DCC?	should contain relevant data (e.g., meter readings) in the agreed format. For Question 5.6.1.1 E – Your response should include the following: • Processes on how you will manage rejections including rejection reasons, initial responses, any diagnostic procedures, rectifying any issues, escalation processes and reporting and any preventive measures.		
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) b) On de-appointment and in absence of an actual read for a traditional meter, how do you ensure you send an estimated read in line with the requirement? c) For smart meters how do you ensure you send the opening cumulative reading	 For Question 5.6.1.2 A – Your response should include the following: 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. 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. Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. How you will gain assurance that even with these additional changes, your wider end-to-end systems and 	MHHS-BR-DS- 008.1 MHHS-BR- DS-023.1 MHHS-BR-DS- 022 MHHS-BR-DS- 024 MHHS-BR-DS- 104	

and, where available, the register reads?	processes will still enable you to operate in line with your BSCCode 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 5.6.1.2 B – Your response should include the following:	
	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	
	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	
	For Question 5.6.1.2 C – Your response should include the following:	
	For Advanced and Smart meters, the process of obtaining actual consumption history up to the point of de-appointment for submission to settlements	
	The process for downloading, maintaining, and sending cumulative and register reads for Smart meters	

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5.6.1.3 Meter	a)	Excluding the functional	For Question 5.6.1.3 A – Your response	MHHS-BR-DS-	
Readings	,	elements tested in	should address the following:	046 MHHS-BR-	
		PIT/SIT/QT, what further	g	DS-047 MHHS-	
		changes have been made	A disclosure of changes to systems and	BR-DS-048	
		to your E2E business	processes which have not been tested	MHHS-BR-DS-	
		process? (e.g. to inputs,	as part of PIT/SIT/QT, as above.	045	
		workflows, integrations, and	·	MHHS-BR-DS-	
		downstream systems and	Any instances where you have opted out	053	
		processes; this may be	of receiving DIP Publications, and how	MHHS-BR-DS-	
		nothing). In the case that	you will ensure you will receive this	098	
		changes have been made,	information.	MHHS-BR-DS-	
		how have you tested these		098.1	
		updated E2E business	How you will gain assurance that even	MHHS-BR-DS-	
		process (e.g. E2E process	with these additional changes, your wider end-to-end systems and	111	
		changes tested in own UIT	processes will still enable you to operate	MHHS-BR-DS-	
		environment)	in line with your BSCCode	160	
			Requirements, as above.		
	b)	What third party			
		involvement (if any) is	If there are no relevant additional		
		involved in the collection	changes to disclose for this business		
		process?	process, please write "N/A".		
	c)	When the meter is unable	For Question 5.6.1.3 B – Your response		
		to be read what process	should include the following:		
		and follow up action do you take?			
		iare:	If you plan to utilise third parties for		
	d)	How does this process vary	collecting meter reads, how will		
	,	dependant on when the	responsibilities be split between the SDS		
		meter type is Smart and it	and third party		
		has been agreed with the			
		Supplier to obtain an on-	How you will manage, schedule, and		
		site read?	arrange site visits for Traditional Meters to enable submission of consumption		
			data for settlement		
	e)	How do you ensure they	data for obtaining		
		accurately obtain and maintain records of	For Question 5.6.1.3 C – Your response		
		Override Reads sent by the	should include the following:		
		Supplier via the DIP?	onedia include the following.		
	l	Cappilor via trio Dir :			

		Processes to investigate where meter reads cannot be obtained, and where this process differs with Smart meters (if any). For Question 5.6.1.3 D – Your response should include the following: 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. For Question 5.6.1.3 E – Your response should include the following: Processes to include obtaining overriding reads and maintaining overriding reads which has been sent by the Supplier.		
5.6.1.4 Meter	a) Excluding the functional	For Question 5.6.1.3 F Your response should include the following: Processes to include obtaining overriding reads and maintaining overriding reads which has been sent by the Supplier. For Question 5.6.1.4 A - Your response	MHHS-BR-DS-	
Technical Details (MTDs)	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	should include the following: A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. Any instances where you have opted out of receiving DIP Publications, and how	003 MHHS-BR-DS- 006 MHHS-BR-DS- 006.1 MHHS-BR-DS- 016	

b) c) d)	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) How do you receive MTDs through different sources e.g. DTN and MDR/DIP? How do you investigate discrepancies when MTDs are received from the DIP? How will you process MTDs received from a metering service which does not turn out to be the metering service appointed? How do you maintain your metering recording accurately?	you will ensure you will receive this information. 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 BSCCode Requirements, as above. If there are no relevant additional changes to disclose for this business process, please write "N/A". For Question 5.6.1.4 B - Your response should include the following: The method(s) used to receive and maintain records of MTDs for Traditional Meters For Question 5.6.1.4 C - Your response should include the following:	MHHS-BR-DS- 121 MHHS-BR-DS- 023.1	
of your change	e note it is not required as part response to outline minor es in the use of the DTN e.g. ate 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	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) 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?	 For Question 5.6.1.5 A - Your response should include the following: A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. 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 Code Requirements, as above. If there are no relevant additional changes to disclose for this business process, please write "N/A" For Question 5.6.1.5 B – Your response should include the following: 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. 	MHHS-BR-DS- 147 MHHS-BR-DS- 147.1	

5.6.1.6 Change of Metering	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) b) How do you identify related MPANs or Import/Export linked meters?	 For Question 5.6.1.6 A – Your response should include the following: A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. 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 Code Requirements, as above. If there are no relevant additional changes to disclose for this business process, please write "N/A". For Question 5.6.1.6 B – Your response should include the following: Related MPANs Import/Export linked meters 	MHHS-BR-DS- 146 MHHS-BR-DS- 121 MHHS-BR-DS- 117 MHHS-BR-DS- 123	

5.6.1.7 5.5.1.7 Operational Requirements	a) What controls do you have in place to ensure that you meet all of your requirements as outlined in the Operational Choreography Version 5.4?	For Question 5.6.5.1.7 A - Your response should include the following: Both preventative controls and detective controls, which could include your monitoring activities and processes for manual intervention. How you will ensure you meet specific processing and response SLAs (these may be referenced in your answers above) How you will ensure you meet your operational requirements which may not have been tested during functional testing, such as OPC_320A to make data available to other parties (as applicable) by 06:00hrs the next Working Day after receiving a notification of disconnection.	OPC_150 OPC_170A OPC_170B OPC_190 OPC_200 OPC_210 OPC_240 OPC_260 OPC_280 OPC_300 OPC_320A OPC_320B OPC_320B OPC_340 OPC_420 OPC_420 OPC_420 OPC_440 OPC_490 OPC_510
5.6.1.8 5.5.1.8 Change of Energisation	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) b) What steps do you follow to obtain and maintain records of Registration Service Notification	 For Question-5.5.1.8 5.6.1.8 A – Your response should include the following: A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. 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 Code Requirements, as above. 	MHHS-BR-DS- 106

c	of Change of Energisation Status updates via the DIP? c) How do you ensure you have accurately estimated meter	If there are no relevant additional changes to disclose for this business process, please write "N/A".	
	readings when no valid readings are received from the Metering Service within 5 working days of a change in Energisation Status?	For Question 5.5.1.8 5.6.1.8 B – Your response should include the following: When receiving the Registration Service Notification of Change of Energisation, what controls do you have in place to ensure that you keep and maintain a record of these notifications?	
		For Question-5.5.1.8 5.6.1.8 C – Your response should include the following:	
		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.	

Data Management

Data Management	Questions	Guidance Points	MHHS requirements	Participant Responses
Area				
5.6. <u>1.9</u> 2.1	 a) What controls do you have in- 	For Question 5.6. <u>1.9</u> 2.1 A – Your	MHHS-BR-DS-073	
Estimation Values	place to ensure that interface	response should include the following:	MHHS-BR-DS-082	
	data updates are captured		MHHS-BR-DS-084	
	within the relevant systems to support wider business	Processes for validating UTC	MHHS-BR-DS-087	
	processes for in scope	Period Level Consumption Data for a given submission, as well as any	WITH TO BIT BO 000	
	services in line with the BSC	estimates.	MHHS-BR-DS-092	
	services in line with the BSC	Commutes.	MHHS-BR-DS-109	

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obligations brought about by MHHS?

- b) Please outline how you have integrated the Smart Validation & Estimation Method Statement into your local working procedures. This should look to cover estimation for missing and/or invalid periods or re-estimating consumption.
- Please outline how the most appropriate method is selected from the SDS method statement.
- d) When a new load shape is available how will you reprocess the previously submitted data?
- e) How do you ensure that your obtained cumulative reads via the DIP are stored and used in the estimation process?

Please note this question is not asking for an explanation as to how connection to the DIP is made and maintained. For Question 5.6.<u>1.9</u> 2.1 B&C – Your response should include the following:

- 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
- The process for storing valid register reads for use in the estimation process where no better data is available.

For Question 5.<u>6.1.9</u> 6.2.1 D – Your response should include the following:

As outlined in the Smart V&E method statement Advanced Validation & Estimation Method, please describe your process for handling Load Shape Data, including how you receive this information and the procedures you follow to reprocess previously submitted data

For Question 5.6.2.1 E – Your response should include the following:

 Processes and/or controls of previously obtained actual readings used to estimate reads

5.6.1.10.4 5.5.2.3 Customer Direct Contract	What controls do you have in- place to ensure that interface data updates are captured within the relevant systems to support wider business processes for in scope services in line with the BSC and REC obligations brought about by MHHS?	For Question 5.6.1.10.1.5.5.2.3 A – Your response should include the following: Controls in place to ensure that any appointments and updates to Customer Direct Contracts are reflected in the Registration Services.	MHHS-BR-DS-031 MHHS-BR-DS-032 MHHS-BR-DS-033 MHHS-BR-DS-034 MHHS-BR-DS-035 MHHS-BR-DS-036 MHHS-BR-DS-037
		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.	

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, as outlined in BSCP700.

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

Business Processes

Business Process	Questions	Guidance Points	MHHS	Participant Responses
5.7.1.1 Appointments and/or De- Appointments In line with MHHSP- BP002	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) b) How do you receive the notification from the Registration Service and any supporting information confirming the UMSO appointment? c) How do you obtain the information on submeters, location, latitude/longitude and	 For Question 5.7.1.1 A – Your response should include the following: 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 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. Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. 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 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. 	MHHS-BR-DS-002 MHHS-BR-DS-017	

	Photoelectric Control Unit (PECU) Array details?	If there are no relevant additional changes to disclose for this business process, please write "N/A".	
		For Question 5.7.1.1 B – Your response should address the following:	
		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	
		For Question 5.7.1.1 C – Your response should address the following:	
		The agreed delivery method of MPAN details from the UMSO	
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 been made, how have you tested these updated E2E business process (e.g. E2E process changes tested in own UIT environment) b) How do you receive and validate D0388 unmetered supplies inventory from the UMSO?	 For Question 5.7.1.2 A – Your response should include the following: A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. 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 Code Requirements, as above. If there are no relevant additional changes to disclose for this business process, please write "N/A". 	MHHS-BR- DS-061 MHHS-BR- DS-062 MHHS-BR- DS-063 MHHS-BR- DS-064 MHHS-BR- DS-065 MHHS-BR- DS-066 MHHS-BR- DS-066 MHHS-BR- DS-067 MHHS-BR- DS-068 MHHS-BR- DS-068 MHHS-BR- DS-069

		H. Booo		MHHS-BR-	
1	c)	How do you send the D0389 UMS response following validation?	For Question 5.7.1.2 B – Your response should address the following:	DS-071	
	d)	Upon being appointed how do you obtain and manage the provision of the PECU Arrays	The agreed method for receiving and validating D0388 flows from the UMSO		
		data and support delivery of consumption data?	For Question 5.7.1.2 C – Your response should address the following:		
	e)	Upon being appointed how do you obtain details of the Central Management System (CMS) from the customer, UMSO or CMS provider?	The sending of the D0389 response flow following rejection, outlining whether each MPAN is accepted or rejected, and where rejected, the reason for rejection		
	f)	How do you obtain the switching times and load information from the CMS?	For Question 5.7.1.2 D – Your response should address the following: The method for receiving and maintaining the provision of PECU arrays in line with the UMSDS Method Statement		
			For Question 5.7.1.2 E – Your response should address the following:		
			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		
			For Question 5.7.1.2 F – Your response should address the following:		
			 Your chosen method for obtaining and validating switching times and load information from CMS 		

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5.7.1.3 Identifying Faults	b)	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) What is the process to receive fault notifications? What actions do you take to investigate faulty equipment?	 For Question 5.7.1.3 A – Your response should include the following: A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. Any instances where you have opted out of receiving DIP Publications, and how you will ensure you will receive this information. 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 Code Requirements, as above. If there are no relevant additional changes to disclose for this business process, please write "N/A". 	MHHS-BR-DS- 147.2
	I		 For Question 5.7.1.3 B – Your response should address the following: How you will receive notification (either in a system/portal or otherwise e.g. email) when there is a fault with the metering equipment The UMSDS needs to investigate any faulty metering equipment, identified, or notified to them. For Question 5.7.1.3 C – Your response should address the following: 	

		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) will be provided upon investigation 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.	
5.7.1.4 Operational Requirements	a) What controls do you have in place to ensure that you meet all of your requirements as outlined in the Operational Choreography	 For Question 5.7.1.4 A - Your response should include the following: Both preventative controls and detective controls, which could include your monitoring activities and processes for manual intervention. How you will ensure you meet specific processing and response SLAs (these may be referenced in your answers above) How you will ensure you meet your operational requirements which may not have been tested during functional testing, such as OPC_320A to make data available to other parties (as applicable) by 06:00hrs the next Working Day after receiving a notification of disconnection 	OPC_150 OPC_170A OPC_170B OPC_190 OPC_200 OPC_210 OPC_240 OPC_260 OPC_280 OPC_300 OPC_320A OPC_320A OPC_320B OPC_320B OPC_420 OPC_420 OPC_440 OPC_440 OPC_490 OPC_510, MHHS-BR-DS-040

Data Management

Data Management	Questions	Guidance Points	MHHS Requirements	Participant Responses
Area				

5.7.2.1 Data	a)	What controls do you	For Question 5.7.2.1 A – Your response	MHHS-BR-DS-078	
Processing		have in-place to ensure	should address the following:	MHHS-BR-DS-081	
		that interface data		MHHS-BR-DS-085	
		updates are captured	When updates are received, what	MHHS-BR-DS-090	
		within the relevant	automated and manual processes are	I William Bit Be see	
		systems to support	in place to update the system in line		
		wider business	with business processes.	4	
		processes for in scope	For Question 5.7.2.1 B –Your response		
		services in line with the	should address the following:		
		BSC obligations brought			
		about by MHHS?	* The man to man to make the control of the control		
	b)	When a new load shape	The process to reprocess previously submitted data following the UMSDS		
	D)	is available how will you	Method Statement when a new load		
		reprocess the	shape is made available.		
		previously submitted			
		data?	For Question 5.7.2.1 C – Your response		
			should address the following:		
	c)	How do you calculate	-		
	,	consumption for all UTC	Processes and/or systems used to		
		periods?	calculate consumption for all UTC		
			periods, and methods used to check		
	d)	How do you re-calculate	all calculations are complete and accurate		
		consumption when	accurate		
		better data becomes	For Question 5.7.2.1 D – Your response	-	
		available?	should address the following:		
			Should address the following.		
			Circumstances in which you may re-		
			calculate consumption data, and how		
			this re-calculation is performed		
57000	1 ,				
5.7.2.2 Customer	,	hat controls do you have	For Question 5.7.2.2 A – Your response	MHHS-BR-DS-031	
Direct Contract		place to ensure that	should include the following:	MHHS-BR-DS-032	
		erface data updates are		MHHS-BR-DS-033	
		ptured within the relevant stems to support wider	Controls in place to ensure that any	MHHS-BR-DS-034	
		siness processes for in	appointments and updates to	MHHS-BR-DS-035	
		ope services in line with	Customer Direct Contracts are	MHHS-BR-DS-036	
	50	ope services in line with	reflected in the Registration Services.	MHHS-BR-DS-037	

the BSC obligations brought about by MHHS?	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	
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5.8 Metering Equipment Manager Operator Agent (MEMMOA)

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).

Business Process	Questions	Guidance Points	MHHS	Participant Responses
Area			requirements	
5.8.1.1 Metering Role	a) Please confirm for which of the following segments you intend to operate in: Smart Advanced Smart and Advanced	For Question 5.8.1.1 A – Your response should include the following: • Which MEMMOA segment(s) you are applying to Qualify in, hence complete your testing for.		
5.8.1.2 Appointments In line with MHHSP-BP002 and 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. E2E process changes tested in own UIT environment) b) What controls do you have in place to ensure the end-to-end process is carried out within MHHS defined timescales as outlined in the Operational Choreography and baselined in the relevant codes? c) What controls do you have in place to identify auto de-	For Question 5.8.1.2 A – Your response should include the following: • 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.	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- 006.1 MHHS-BR-MS- 007 MHHS-BR-MS- 007 MHHS-BR-MS- 008 MHHS-BR-MS- 008 MHHS-BR-MS- 008.1 MHHS-BR-MS- 009	

appointments by the Registration Services?	How you will gain assurance	MHHS-BR-MS-	
Registration Services?	 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 5.8.1.2 B – Your response should include the following: 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. 	009.1 MHHS-BR-MS- 025 MHHS-BR-MS- 040 MHHS-BR-MS- 086 MHHS-BR-MS- 087 MHHS-BR-MS- 088 MHHS-BR-MS- 088.1	

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		For Question 5.8.1.2 C – Your response should include the following: • Controls in place to identify where you have been automatically de-appointed as the MEMMOA, for example where the change of meter segment process was not aligned with the appointment process. • Controls to ensure that your own records are up-to-date to reflect that you were automatically de-appointed. • How you will work with the Supplier to resolve the issue.		
5.8.1.3 Change of Energisation Status In line with MHHSP- BP008	a) Excluding the functional elements tested in PIT/S what further changes ha made to your E2E busin process? (e.g. to inputs, workflows, integrations, downstream systems ar processes; this may be In the case that changes been made, how have y tested these updated E2 business process (e.g. It process changes tested UIT environment) b) What controls do you haplace to ensure that for aspects of the change of energisation process, the	following: • A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. • 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. • If there are no relevant additional changes to disclose for this business process, please write "N/A".	042-1 MHHS-BR-MS- 043	

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	communication of relevant information is sent within the timescales set out in the REC. (this response should include the following areas: a. Change of energisation status response (smart, advanced, and traditional) b. Capture and publish cumulative read c. When change of energisation cannot be actioned d. Investigating and resubmitting rejections)	For Question 5.8.1.3 B – Your response should include the following: Controls to ensure change of energisation status updates from the LDSO are processed within 3 working days. 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. 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.	MHHS-BR-MS- 046.1 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? (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) b) What controls do you have in place to ensure that you can carry out a change of segment	 For Question 5.8.1.4 A – Your response should include the following: A disclosure of changes to systems and processes which have not been tested as part of PIT/SIT/QT, as above. 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. If there are no relevant additional changes to disclose for this business process, please write "N/A". 	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	

	meter exchange and publish details and reads where you are not formally appointed as the Metering Service but do have an accepted prospective appointment.	For Question 5.8.1.4 B – Your response should include the following: Controls do you have in place to ensure you have identified meters which you are not appointed to, but have accepted a prospective appointment. How your systems will reflect this status and enable related processes such as a change of segment meter exchange.		
5.8.1.5 Migration Requirements	What controls do you have inplace to ensure you meet the specific appointment and meter technical details requirements during a migration?	For Question 5.8.1.5 A – Your response should include the following: 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. Additionally, when you identify that meter technical details change after these have already been sent by to the incoming meter service as part of a migration, how will you ensure you send the updated meter technical details.	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-Rigration-CoA(MS)-MOP-001 MHHS-Rigration-CoA(MS)-MOP-001 MHHS-Rigration-CoA(MS)-MOP-002 MHHS-Rigration-CoA(MS)-MOP-002 MHHS-Rigration-CoA(MS)-MOP-003	

5.8.1. <u>6.</u> 9 Operational	What controls do you have in place to ensure that you meet	For Question 5.8.1.6.9 A - Your response should include the	MHHS-Migration- Mis-MOP-001 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 OPC_150 OPC_170A
Requirements	all of your requirements as outlined in the Operational Choreography Version 5.4?	 Both preventative controls and detective controls, which could include your monitoring activities and processes for manual intervention. How you will ensure you meet specific processing and response SLAs (these may be referenced in your answers above) How you will ensure you meet your operational requirements which may not have been tested during functional testing, such as OPC_320A to make data available to other parties (as 	OPC_170B OPC_190 OPC_200 OPC_210 OPC_2210 OPC_240 OPC_260 OPC_280 OPC_300 OPC_320A OPC_320A OPC_320B OPC_340 OPC_420 OPC_420 OPC_440 OPC_440 OPC_490 OPC_510

applicable) by 06:00hrs the next Working Day after receiving a notification of disconnection.		

Data Management

Data Management	Questions	Guidance Points	MHHS	Participant Responses
Area			requirements	
5.8.2.1 Meter Technical Details (MTDs)	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 REC obligations brought about by MHHS? b) What controls do you have in place to identify when you need	For Question 5.8.1.7.2.4 A – Your response should include the following: 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.	MHHS-BR-MS- 017 MHHS-BR-MS- 018 MHHS-BR-MS- 019 MHHS-BR-MS- 020 MHHS-BR-MS- 021	

- to send Meter Technical Details during a Change of Supplier and/or MEMMOA Appointment.
- c) What controls do you have inplace 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.
- d) How will you identify and investigate any discrepancies in Meter Technical Details received from the incumbent Metering Service and those received from the Registration Service?
- e) What controls do you have in place to identify missing Meter Technical Details following a MEMMOA appointment to ensure you request these Meter Technical Details from the losing MEMMOA.

For Question 5.8.<u>1.7</u> <u>2.1</u> B – Your response should include the following:

 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.

For Question 5.8.<u>1</u>2.4<u>7</u> C – Your response should include the following:

 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.

For Question 5.8.1.7 2.4 D – Your response should include the following:

- Proactive controls to identify any discrepancies between MTDs received from incumbent MEMMOA and those received from the Registration Service.
- Where discrepancies are identified, what business processes will you have in place to investigate and resolve the difference in a timely manner.

MHHS-BR-MS-

MHHS-BR-MS-023

MHHS-BR-MS-

024 MHHS-BR-MS-

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MHHS-BR-MS-027

MHHS-BR-MS-

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MHHS-BR-MS-030

MHHS-BR-MS-058

MHHS-BR-MS-062

MHHS-BR-MS-063

MHHS-BR-MS-

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MHHS-BR-MS-

		For Question 5.8.12.74 E – Your response should include the following: 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 MEMMOA in a timely manner.	
5.8.2.2 Customer Direct Contracts	What controls do you have in- place to ensure that the published Customer Direct Contract details are accurate and up to date.	For Question 5.8.1.8 -8.2.2 A – Your response should include the following: • 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. • 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.	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- 015
5.8.2.3 Registration Data	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? (this is relevant to: MPL Address, Domestic Premises Indicator, Related MPAN, Energy Direction, Metered	For Question 5.8.1.9 8.2.3 A – Your response should include the following: • Where there have been updates to registration data, any controls in place to ensure all changes are captured and maintained accurately within relevant systems.	MHHS-BR-MS- 057 MHHS-BR-MS- 058.2 MHHS-BR-MS- 058.3 MHHS-BR-MS- 065 MHHS-BR-MS- 066

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	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- 077
5.8.2.4 Faults	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?	For Question 5.8.1.10 8.2.4 A — Your response should include the following: Controls in place to ensure you identify where you are required to investigate a fault, and that an appropriate work item is created. 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.	MHHS-BR-MS- 052 MHHS-BR-MS- 078 MHHS-BR-MS- 079

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5.8.2.5 Consumption Data and Cumulative Reads	a)	What controls do you have in- place to ensure that you capture and send the latest Consumption Data and Cumulative Reads when needed	response s following: Contro you cal reading these r Contro you cal Advanc Consul your bi	on 5.8.1.11 2.5 A – Your hould include the ls in place to ensure that oture latest meter gs when on-site and that naintained accordingly. Is in place to ensure that oture and provide ced and Smart mption Data in line with lateral service nents with Suppliers.	MHHS-BR-MS- 054 MHHS-BR-MS- 055 MHHS-BR-MS- 061	
5.8.2.6 Meter Works	a)	What controls do you have inplace to ensure that once meter work is completed that updates are sent within the timescales set out in the REC?	response s following:	on 5.8.1.12 2.6 A – Your hould include the ls in place to ensure that and the required Market ges within the timescales ed in REC Schedule 14, ag in areas such as: Meter change acceptances and rejections Completion of metering work (e.g. installation, removal, exchange) Notification of failure to install or energise metering system Proving tests	MHHS-BR-MS- 037.1 MHHS-BR-MS- 037.2 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- 080.1	

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