REC Internal Testing Guidance Including Market Scenarios

Version 1.0 (17 February 2026)



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CHANGE HISTORY

Version	Status	Issue Date	Reason for Change
1.0	Final	17 February 2026	Supersedes *REC and BSC Joint Storyboards V6.0* after MHHS Transition

1 Introduction

This document provides comprehensive guidance for applicants undertaking the Internal Testing Assessment. It details the required submission format and outlines the specific scenarios that must be included as part of the testing evidence.

The Internal Testing Assessment itself involves running tests to demonstrate your systems and process can operate against a defined list of market scenarios, as part of the conclusion of the Business Solution Assessment. The market scenarios you need to test will be defined using a risk-based approach depending on the answers to your BSA. The complete list of market scenarios relevant to your applicant type is presented later in this guidance document.

2 Internal Testing Submission Format

This section presents the Code Manager's guidelines for your Internal Testing Submission format. The accompanying table details the specific requirements and offers guidance on the expected content and supporting evidence for your application.

Note – If during this assessment the Code Manager finds issues against specific requirements this will be communicated to the applicant as “Follow Ups” or “Observations”. The applicant is then required to propose and carry out corrective actions to remediate these, prior to qualification or at a set due date after qualification. Those required to be evidenced after qualification will be tracked in the Remediation Tracker on the REC Portal.

Test Area	Requirements	Appropriate Evidence
1.1	**Test Plan** – You should provide your overall Test Plan Documentation to demonstrate execution of all Market Scenarios, including their: • Start and end dates • Test durations	*Test Plan Documentation*
1.2	**Test Scope** – The Test Plan Document to be uploaded should detail the scope of the testing. This should include each of the necessary steps for all of the Market Scenarios.	*Test Plan Documentation*
1.3	**Defect Management** – The Test Plan Document should also include elements such as: • Defect management i.e., evidence of how you plan to or actively respond to defects that arise and how these defects may be resolved during testing. • Prioritisation criteria for defects i.e., by what criteria do you prioritise defects to resolve them • Logging and regression testing approaches i.e., how do you implement logging and regression testing techniques to enable the Internal Testing process. • Analysis and Prevention i.e., what steps do you take to address common or complicated defects. • Environment plan i.e., in what environments does testing take place in e.g., development, demonstration or production environments.	*Test Plan Documentation* *Defect Log and any further physical evidence of defect management*

Test Area	Requirements	Appropriate Evidence
1.4	**Test Data** – To validate test results, you should provide the Code Manager with the hypothetical data used during Internal Testing, demonstrating the relationship between system inputs and outputs. Additionally, it is helpful to explain how test data was created e.g. fabricated MPANs/addresses adapted from real work orders.	*Test Plan Documentation* *Test Data Scripts*
1.5	**Training & Working Instructions** – You should provide uploads of staff training procedures (initial and ongoing) and other resources used to ensure employees are adequately trained to successfully send Market Messages, in terms of both the platform usage and the process. Please reference which Training & Working Instructions documents are relevant to undertaking testing of each Market Scenario. If you make use of third-party employees, please detail here how you assured that they are adequately trained.	*Employee Training Manuals* *Evidence of Training Delivered e.g. Training Logs or Matrices*
1.6	**Roles & Responsibilities** – You should provide detail of the key roles within the party and their associated responsibilities required to perform Market Scenario Testing. Answers should also detail the companies involved e.g. the Party and the Market Messaging Application .	*Test Plan Documentation*
1.7	**Test Owners** – You should provide details of named Test Owners who will be reviewing and approving testing, along with those responsible for Test Governance.	*Names of Testers and Reviewers of the Internal Testing*
1.8	**Testing Conditions** – You should confirm to the Code Manager that testing has been executed under ordinary operational conditions, else flagging changes to the planned process. Any additional context that the Code Manager should be aware of regarding the testing results should also be included within this section.	*Test Plan Documentation* *Evidence of any deviations from the planned testing process*
2.1 – 2.4	**Test Evidence** – The Test Plan document should be supported by evidence, such as screenshots of the successful execution of each of the steps listed in the Test Case Scenario Table. This is to enable the Code Manager to verify that the Party is able to send Market Messages in an accurate and efficient manner. For clarity and a well-defined evidence base, providing supporting documentation for each Market Scenario separately is recommended. This is to ensure clear traceability for each market message.	*Test Execution Evidence Files e.g., screenshots of each of the steps for the appropriate Market Scenarios*

3 Market Scenarios

This section details the testing scenarios for various applicant types. This document contains scenarios applicable to Gas Suppliers, MAMs, and SIPs. Scenarios relevant to Electricity Suppliers, DNOs, and MOAs are contained a separate document referenced below.

Applicant Type	Market Scenarios included in this document	Market Scenarios included in the REC Internal Testing Scenarios for Electricity Suppliers, Distribution Network Operators and Meter Operator Agents covering DIP and DTN Market Messages and the CSS External Testing Guidance.
Gas Suppliers	✓	
Meter Asset Managers	✓	
Safe Isolation Providers	✓	
Electricity Supplier		✓
Distribution Network Operators		✓
Meter Operator Agents		✓

3.1 Market Scenarios Applicable To Electricity Suppliers, DNOs & MOAs

Please refer to REC Internal Testing Scenarios for Electricity Suppliers, Distribution Network Operators and Meter Operator Agents.

3.2 Market Scenarios Applicable To Gas Suppliers

3.2.1 MESS001 – Switch Request as Gaining Supplier

Applicant Role: Gaining Gas Supplier

1. Initial Conditions:
    - The Customer intends to change their Supplier and has received a quotation for supply from the potential Gaining Supplier.
    - The Gaining Supplier has retained evidence of all of the above.
    - The Metering Point is energised.

2. The Scenario:
   The Customer accepts the terms of the Gaining Supplier. The Gaining Supplier submits a Switch Request to the CSS Provider. The Gaining Supplier receives a notification from the CSS Provider that the Switch Request has been validated, and is pending[1]. The Losing Supplier confirms that it does not intend to raise an objection, or does not submit an objection by the end of the objection period to the CSS Provider. The CSS Provider updates the registration status of the Metering Point to 'Confirmed', and notifies the Gaining Supplier and the MAM.

   The Gaining Supplier appoints its agents to the Metering Point. Each of the agents accepts its appointment and, through the exchange of Customer and Metering Point information between the Gaining Supplier and new agents, the appointment process is completed. This is notified to the Gaining Supplier when it receives confirmation from the appointed Data Collector that the Metering Point is now included in the reading schedules and when the Gaining Supplier receives the Metering Point technical details from the Meter Operator.

3. Final Conditions:
    - The Gaining Supplier registered the Metering Point with the Registration Service with all Supplier-owned items set.
    - The Gaining Supplier's systems are up to date with all Customer, Metering Point and Switch Request information.
    - The Gaining Supplier has completed any Customer notifications to finalise the Switch Request according to their normal business processes.
    - The first day's advances have been received by the Supplier.

4. Variations
    - None noted.

[1] If the Switch Request is part of an One Fail All Fail (OFAF) group, the status of the request will be pending but not proceed to 'Confirmed'. OFAF means that a Switch Request has been identified as dependent upon the successful progress of other Switch Requests in the same OFAF Group (or, following Validation of one or more of those Switch Requests, all the resulting Registrations while they are either Pending or Confirmed).

3.2.2 MESS002 – Switch Request as Losing Supplier

Applicant Role: Losing Gas Supplier

1. Initial Conditions:
   - The Losing Supplier has a recorded history for the Metering Point.
   - The Metering Point is energised.
   - The Losing Supplier has retained evidence of both of the above.
   - The Customer has entered into a contract for supply from a Gaining Supplier.
   - The Gaining Supplier has registered the Metering Point with the CSS and all Supplier-owned registration data items are set.

2. The Scenario:

The Losing Supplier is notified of the termination of its registration. The Losing Supplier receives the 'Invitation to Intervene' but responds with an Objection response that does not contest the Gaining Supplier's acquisition of the customer. Within 1WD of the registration status being updated to 'Confirmed' in respect of the Gaining Supplier's switch request, the Losing Supplier submits the 'Notify Old Supplier Information'[2] notification to the Gaining Supplier. The Losing Supplier terminates the appointment of its agents to the Metering Point.

3. Final Conditions:
   - The Losing Supplier has terminated the appointments for its agents to the Metering Point
   - The Losing Supplier has closed the Customer's account according to its normal business processes.

4. Variations
   - None noted.

3.2.3 MESS003 – Switch Request as Gaining Supplier with Upheld Objection

Applicant Role: Gaining Gas Supplier

1. Initial Conditions:
   - The Gaining Supplier has no recorded history for the Metering Point.
   - The Customer lives at the premises at which the Metering Point is located.
   - The Customer has entered into a contract for supply with the Gaining Supplier.
   - The Gaining Supplier has retained evidence of all of the above.
   - The Metering Point is energised.

2. The Scenario:

The Gaining Supplier submits a Switch Request[3] to the CSS Provider. The CSS Provider determines the request is valid and sets the Registration Status to Pending. The CSS Provider issues an 'invitation to intervene'[4] to the Losing Supplier, who then responses with a Switch Intervention[5] within the objection window outlining the reason for the objection. The CSS Provider validates the objection and notifies the Losing Supplier that the objection has been validated.[6] The CSS Provider updates the Registration Status of the Switch Request to cancelled, and notifies the Gaining Supplier, Losing Supplier, Smart DSP, Gaining Shipper, Losing Shipper, GES and GRDA. The Gaining Supplier carries out its normal business processes for cancellation of this Switch Request.

3. Final Conditions:
   - The Gaining Supplier has used its normal business processes to carry out and then cancel its registration.
   - Any agent appointments to the Metering Point that the Gaining Supplier has made have been terminated.
   - The Gaining Supplier has taken the necessary steps to ensure billing does not take place.

4. Variations

The following variations may, optionally, apply with appropriate interpretation of the sections above:
   - The Customer contacts the Gaining Supplier stating that they have not entered into a contract with the Gaining Supplier. The Gaining Supplier follows its procedures for a co-operative objection.

3.2.4 MESS004 – Switch Request as Losing Supplier with Upheld Objection

Applicant Role: Losing Gas Supplier

1. Initial Conditions:

- The Losing Supplier has a recorded history for the Metering Point
- The Metering Point is energised
- The Losing Supplier has retained evidence of all of the above
- The Customer has NOT entered into a contract for gas supply with a Gaining Supplier
- The Gaining Supplier has registered the Meter Point with the appropriate Registration Service.

2. The Scenario:

The Losing Supplier is sent an Invitation to Intervene by the CSS Provider in respect of a metering point which it currently supplies. The Losing Supplier engages with the Gaining Supplier and it is agreed that the Gaining Supplier has submitted the Switch Request in error. The Losing Supplier agrees to raise an objection, and responds to the Invitation to Intervene with a Switch Intervention to object to the Switch Request made by the Gaining Supplier. The CSS Provider notifies the Losing Supplier that the Objection Response has been validated and updates the Registration Status to cancelled, notifying the Gaining Supplier, Losing Supplier, Smart DSP, Gaining Shipper, Losing Shipper, GES and GRDA.

3. Final Conditions:

- The Losing Supplier's records for the Metering Point show that it is unchanged from the initial conditions.
- Throughout the story the Losing Supplier has processed all notifications according to their normal business processes.

4. Variations

- Instead of the Losing Supplier submitting a Switch Intervention, the Gaining Supplier submits a Switch Intervention[7] which contains a Withdrawal Request in respect of the Switch Request already submitted. The CSS Provider validates the Withdrawal Request, and notifies the Gaining Supplier, Losing Supplier, Smart DSP, Gaining Shipper, Losing Shipper, GES and GRDA that the Switch Request has been withdrawn.
- Where the Customer identifies that it should not have been switched to the Gaining Supplier before the objection window closes, the Customer contacts the Losing Supplier and notifies the Losing Supplier that it does not wish to be switched to the Gaining Supplier. The Losing Supplier submits an Annulment Request[8] to the CSS Provider. The CSS Provider validates the Annulment Request and notifies the Losing Supplier that the request is valid, updates the Registration Status to 'Cancelled' and notifies the Gaining Supplier, Losing Supplier, Smart DSP, Gaining Shipper, Losing Shipper, GES and GRDA that the Switch Request has been withdrawn.

3.2.5 MESS005 – Switch Request as Gaining Supplier with Disputed Meter Read

Applicant Role: Gaining Gas Supplier

1. Initial Conditions:

- A Customer intends to change their Supplier and has received a quotation for supply from a potential Gaining Supplier.
- The Customer has accepted the terms of the Gaining Supplier.
- The Gaining Supplier has no recorded history for the Metering Point.
- The Gaining Supplier has retained evidence of all of the above.
- The Metering Point is energised.

2. The Scenario:

The Gaining Supplier submits a Switch Request to the CSS Provider. The CSS Provider validates the Switch Request and notifies the Gaining Supplier that it is valid, and the Registration Status is updated to be 'Pending'. No objection is raised by the Losing Supplier and the CSS Provider subsequently updates the Registration Status to 'Confirmed'.

The Gaining Supplier appoints its agents to the Metering Point in accordance with its stated business procedures. Each of the agents accepts the appointment and, through the exchange of Customer and agent details between the Gaining Supplier and the new agents, the appointment process is completed. The Gaining Supplier is notified by their appointed Data Collector that the Metering Point is now included in the reading schedules and by their Meter Operator of the Metering Point technical details.

On the Supply Start Date the Gaining Supplier contacts the Customer and the Customer provides a meter reading, which the Supplier forwards to the Data Collector. However, the Supplier receives notification from the Data Collector that the Customer's reading has failed validation. The Gaining Supplier instructs the Data Collector to obtain an actual reading, however, the New Data Collector is unable to obtain access to the meter and on SSD + 8 Working Days, notifies the Gaining Supplier of a deemed Change of Supplier meter reading.

The New Data Collector calculates the Annualised Advance (AA) and Estimated Annual Consumption (EAC) for the Metering Point and notifies the relevant parties. On receiving the final account from the Losing Supplier, the Customer disputes the bill. The Gaining Supplier receives a communication from the Losing Supplier with regard to the disputed read. The Losing and Gaining Supplier agree that in order to resolve the dispute an actual read should be obtained.

The Gaining and Losing Supplier exchange messages via the Switching Meter Reading Acceptance[9] flow or the Disputed Readings or Missing Readings on Change of Supplier[10] to propose and agree a meter read, engaging with the Data Collector to obtain another read.

The Gaining Supplier receives notification of the actual read via its Data Collector, and sends this to the Losing Supplier so the Losing Supplier can prepare a revised closing bill. The New Data Collector re-calculates the AA and EAC for the Metering Point and notifies the relevant parties.

3. Final Conditions:

- The Gaining Supplier is registered for the Metering Point with the Registration Service with all Supplier-owned items correctly set.

- The Gaining Supplier's systems are up to date with all Customer, Metering Point, CoS reading and agent information.
- The Gaining Supplier has completed any Customer notifications to finalise the CoS according to their normal business processes.

4. Variations

- If the metering point includes a gas supply point, the Switch Meter Reading will be received via the Shipper.
- For a gas metering point, if the agreed Switch Meter Read is not accepted by the CDSP, then the Gaining Supplier will request a replacement read from the Losing Supplier. The Losing Supplier will then submit the replacement metering readings to the Shipper.

3.2.6 MESS006 – Switch Request as Losing Supplier with Disputed Meter Read

Applicant Role: Losing Gas Supplier

1. Initial Conditions:

- The Losing Supplier has a recorded history for the Metering Point.
- The Metering Point is energised.
- The Losing Supplier has retained evidence of all of the above.

2. The Scenario:

The Losing Supplier receives an Invitation to Intervene from the CSS Provider. The Losing Supplier does not have a valid reason for an objection provides a Switch Intervention that it does not object to the Switch Request. The Losing Supplier sends the 'Notify Old Supplier Information' to the Gaining Supplier.

The Losing Supplier de-appoints its agents according to its normal business practices. The Losing Supplier receives notification of the new Change of Supplier reading based on a deemed read. The Losing Supplier accepts this reading and sends a final bill to the Customer. The Losing Data Collector calculates the Annualised Advance (AA) and Estimated Annual Consumption (EAC) for the Metering Point and notifies the relevant parties.

The Customer, however, disputes the bill (as it was not based on the reading provided by the Customer to the Gaining Supplier) and the discrepancy in units used is such that an allowance to the Customer is not possible.

The Losing Supplier then contacts the Gaining Supplier in order to resolve the dispute. The Gaining and Losing Supplier exchange messages via the Switching Meter Reading Acceptance[11] flow or the Disputed Readings or Missing Readings on Change of Supplier[12] to propose and agree a meter read, engaging with the Data Collector to obtain another read.

The Losing Supplier receives notification of both the withdrawn and new change of supply readings. The Losing Supplier re-sends the closing bill to the Customer based on this new reading and the Customer settles the account. The Old Data Collector re-calculates the AA and EAC for the Metering Point and notifies the relevant parties.

3. Final Conditions:

- The Losing Supplier has terminated the appointments for its agents to the Metering Point.
- The Losing Supplier has closed the Customer's account according to their normal business processes.

4. Variations

None.

3.2.7 MESS007 – New Metering System Installation and Initial Registration

Applicant Role: Gas Supplier

1. Initial Conditions:

- There is no record of the Metering Point on the Supplier's systems.
- A Customer has approached the Supplier requesting an installation for the connection of a new Metering Point and has entered into a supply contract.
- The Customer Mailing Address is different from the address of the new connection.
- The Customer has no special needs.
- The Customer has requested their current Supplier to install the New Connection.
- The Supplier has retained evidence of all of the above.

2. The Scenario:

The Supplier requests the Distributor to install a new connection on behalf of the Customer. The Distributor creates a new RMP Record within the Gas Retail Data Service (GRDS), and a skeleton record within the Supplier Meter Registration Service (SMRS). The Gas Retail Data Agent (GRDA) sends a new RMP Record with a status of 'Created' to the CSS Provider.

The Supplier confirms to their Customer that the new Metering Point has been established and provides a quotation for supply which the Customer accepts.

The Supplier appoints its agents. All of the agents confirm acceptance of their appointments and the appointment process is completed by the exchange of Customer and agent details between the Supplier and its agents. The MAM is instructed to install metering equipment, and in due course confirms to the Supplier that installation has been completed.

The Supplier submits an Initial Registration Request[13] to the CSS Provider. The CSS Provider completes validation of the Initial Registration Request and notifies the Supplier that the request has been validated, and notifies the Supplier, Smart DSP, Shipper, GES and GRDA.

The Supplier receives details regarding the Metering Equipment in accordance with the Metering Operations Schedule from the MAM.

3. Final Conditions:

- The Metering Point is registered to the Supplier with all registration data items set.
- All relevant Customer data, registration data, metering and mapping details and the initial reading plus the initial EAC are recorded on the Supplier's systems.
- The Supplier has completed any Customer notifications to finalise the New Connection and its Registration according to their normal business processes.
- All agents are appointed and the Metering Point is in the read schedule of the Data Collector (DC).

4. Variations

- None noted.

3.2.8 MESS008 – Update to Priority Services Register

Applicant Role: Gas Supplier

1. Initial Conditions:

- The customer has initiated contact with the Supplier in relation to its specific needs.

2. The Scenario

During the contact with the Supplier, the customer informs the Supplier that they or a member of their household:

- Have reached the state pension age
- Are disabled or have a long term medical condition
- Are recovering from an injury
- Have a hearing or sight condition
- Have a mental health condition
- Are pregnant or have children under 5
- Have extra communication needs

Upon receiving information relating to the above, the Supplier updates its records to detail the specific information associated with the customer. This customer record is flagged as being required to be included in the Priority Services Register. The Supplier notifies the Shipper of the customer's name and address and requests that this individual is added to the PSR. The Shipper updates the PSR to include the customer and the nature of their condition to be able to provide enhanced support to the customer as needed.

3. Final Conditions:

- The Shipper has updated its records relating to the customer
- The Supplier has received confirmation from the Shipper that the customer has been added to the PSR.

4. Variations

None noted.

3.2.9 MESS009 – Change of MAM with Metering Asset Exchange

Applicant Role: Gas Supplier

1. Initial Conditions:

- The Supplier intends to transfer the MAM from its current organisation to a different entity.
- The Supplier has a contract in place with the new agent and they have agreed a date on which the transfer of responsibility is to take place.
- All registration data for the Metering Points is complete and up to date with the Registration Service.

2. The Scenario

Gaining MAM Scenario:
The Supplier sends an agent appointment request to the gaining MAM. The gaining MAM receives the request and sends confirmation of appointment to the gaining Supplier. The gaining MAM requests the transfer of metering information from the losing MAM. The losing MAM responds and provides the Metering Asset information to the gaining MAM. The gaining MAM responds to receipt of the Metering Asset information.
The gaining MAM informs the MAP of the appointment notification and the MAP responds with an acknowledgment. The gaining MAM confirms back to the gaining Supplier to confirm successful transfer of Metering Asset information. The gaining Supplier confirms receipt of this information to the gaining MAM.

Losing MAM Scenario:
The Supplier sends an agent de-appointment request to the losing MAM. The losing MAM receives the request and sends confirmation of de-appointment to the Supplier. Once the gaining MAM has been appointed, they submit a request of transfer of information to the losing MAM. The losing MAM responds to the request and provides the Metering Asset information to the gaining MAM. The gaining MAM responds to receipt of the Metering Asset information. The losing MAM informs the MAP of the de-appointment notification and the MAP responds with an acknowledgment. The Supplier acknowledges the notification of de-appointment.

3. Final Conditions:

- The Supplier has confirmation that the new MAM has been appointed.
- The incumbent MAM has the Metering Asset removed from their portfolio and the new MAM is now appointed.

4. Variations

Prior to the Consumer deciding to contract with a new Gas Supplier, the Consumer may request a bespoke quotation which requires the Gas Supplier to determine transportation, metering and supply costs

3.2.10 MESS0010 – Exchange or Reposition Metering Asset

Applicant Role: Gas Supplier

1. Initial Conditions:

- The request to exchange the metering asset is sent by the registered Supplier.
- The Metering Asset is not de-energised.

2. The Scenario

The Gas Supplier sends a request to the MAM in relation to a Metering Asset exchange. The MAM acknowledges the request from the Gas Supplier and sends a request to the Meter Worker to exchange the Metering Asset. The MAM pre-notifies the Gas Supplier of the Metering Asset exchange 48 hours ahead of the appointment, and the Gas Supplier confirms approval for the exchange to take place. The Meter Worker undertakes the exchange and notifies the MAM that the exchange is complete. The MAM notifies the Gas Supplier and the CDSP of the Metering Asset exchange, specifying to the CDSP of the MAP identity of the installed Metering Asset. The MAM notifies the old MAP of the Metering Asset removal, who acknowledges receipt of the installation notification. The MAM notifies the new MAP of the Metering Asset installation, who acknowledges receipt of the installation notification.

3. Final Conditions:

- The Supplier has confirmation that the Metering Asset has been exchanged or repositioned.
- MPAS and the Supplier have the correct Meter Technical Details.
- The Supplier send notification of Metering Asset exchange.

4. Variations

None noted.

3.2.11 MESS0011 – Install Metering Asset

Applicant Role: Gas Supplier

1. Initial Conditions:

Any one of the following conditions need to be satisfied in advance of the scenarios listed:

- The Metering Asset is being installed for an existing supply where the Metering Asset had been removed.
- The Metering Asset is being installed for a supply which has never had a Metering Asset before, which may be on the day the supply was commissioned or sometime after.

2. The Scenario

The Gas Supplier sends a request to the MAM to request a Metering Asset installation. The MAM responds to the Meter Asset installation request, acknowledging receipt. The MAM sends a request to the Meter Worker requesting Metering Asset installation, using the information from the request from the Gas Supplier. The Meter Worker sends a notification to the MAM notifying the MEM that the installation was successful. The MAM notifies the Gas Supplier that the installation was successful. The MAM notifies CDSP of the Metering Asset installation. The Gas Supplier responds to the MEM in relation to the installation and sends out the notification of installation and MAP ID to the Shipper.

3. Final Conditions:

- The Supplier has responded to the notification of installation.
- The Supplier has sent the necessary notification of installation and MAP ID through to the Shipper.
- The CDSP and MAP are successfully notified of the Metering Asset installation.

4. Variations

None noted.

3.2.12 MESS0012 – Remove Metering Asset

Applicant Role: Gas Supplier

1. Initial Conditions:

- The request to remove the Metering Asset is sent by the registered Supplier.
- Metering Asset Removal includes removal of all meters assigned to that Metering Asset.
- The Metering Asset is de-energised.

2. The Scenario

The MAM receives a request from the Gas Supplier to remove a Metering Asset. The MAM acknowledges receipt of the request and sends a request to the Meter Worker to remove the Metering Asset. The MAM sends a pre-notification to the Gas Supplier 48 hours prior to the removal of the asset. The Gas Supplier sends a confirmation of the removal to the MAM. Upon completion of the removal job, the Meter Worker sends a notification to the MAM that the removal is complete. The MAM then notifies the Gas Supplier that the Metering Asset has been removed. The MAM sends a notification to CDSP to confirm that the Metering Asset has been removed. The MAM receives an acknowledgement from the Gas Supplier and the CDSP in relation to the Metering Asset removal. The MAM notifies the MAP of the removal of the Metering Asset and the Supplier sends out the notification of removal to the Shipper.

3. Final Conditions:

- The Supplier has responded to the notification of removal.
- The Supplier has sent the necessary notification of removal through to the Shipper.

4. Variations

None noted.

3.2.13 MESS0013 – Entering record for a new Gas Metering Point

Applicant Role: Gas Supplier

1. Initial Conditions:

- There is a new Supply Meter Point created by CDSP.
- The Gas Detail Data Agent sends a new RMP record.
- Valid Asynchronous Validation and setting of RMP status to Operational by the CSS Provider.

2. The Scenario

Once the new RMP Record is sent through by the CSS Provider and this is validated by the ECOES Service Provider, the RMP record will be updated. The Supplier's role in this scenario is to submit the initial Registration Request to the CSS Provider. The MAM will then provide details of Metering Equipment.

3. Final Conditions:

- The Supplier has submitted the initial Registration Request to the CSS Provider.
- The new record has been entered for the New Gas Metering Point.

4. Variations

None noted.

3.2.14 MESS0014 – Terminating Gas RMP or Making Dormant

Applicant Role: Gas Supplier

1. Initial Conditions:

- There has been a recording from the Gas Retail Data Agent that gas is not capable of being offtaken at the Supply Meter Point.
- Valid Asynchronous Validation and setting of RMP status to Operational by the CSS Provider.

2. The Scenario

Following the CSS Provider setting the RMP Status to Dormant or Terminated, the Smart Metering DSP and ECOES Provider will update their respective RMP Records. The Gas Supplier is then required to submit Registration De-activation Request.

3. Final Conditions:

- The Supplier has submitted the Registration De-activation Request.
- The Gas RMP Record has been updated to Dormant or Terminated.

4. Variations

None noted.

3.3 Market Scenarios Applicable To Meter Asset Managers (MAMs)

3.3.1 MESM001 – Metering Asset Installation (Gas)

Applicant Role: MAM

1. Initial Conditions:

Any one of the following conditions need to be satisfied in advance of the scenarios listed:

- The Metering Asset is being installed for an existing supply where the Metering Asset had been removed.
- The Metering Asset is being installed for a supply which has never had a Metering Asset before, which may be on the day the supply was commissioned or sometime after.

2. The Scenario:

The Gas Supplier sends a request to the MAM to request a Metering Asset installation. The MAM responds to the Meter Asset installation request, acknowledging receipt. The MAM sends a request to the Meter Worker requesting Metering Asset installation, using the information from the request from the Gas Supplier. The Meter Worker sends a notification to the MAM notifying the MAM that the installation was successful. The MAM notifies the Gas Supplier that the installation was successful. The MAM notifies CDSP of the Metering Asset installation. The Gas Supplier responds to the MEM in relation to the installation. The MEM notifies the MAP of the Metering Asset installation.

3. Final Conditions:

- The MAM has successfully notified the Gas Supplier that the meter has been installed.
- The CDSP and MAP are successfully notified of the Metering Asset installation.

4. Variations

- None noted.

3.3.2 MESM002 – Metering Asset Removal

Applicant Role: MAM

1. Initial Conditions:

- The request to remove the Metering Asset is sent by the registered Supplier.
- Metering Asset Removal includes removal of all meters assigned to that Metering Asset.
- The Metering Asset is de-energised.
- The MAM has retained evidence of the above.

2. The Scenario:

The MAM receives a request from the Gas Supplier to remove a Metering Asset. The MAM acknowledges receipt of the request and sends a request to the Meter Worker to remove the Metering Asset. The MAM sends a pre-notification to the Gas Supplier 48 hours prior to the removal of the asset. The Gas Supplier sends a confirmation of the removal to the MAM. Upon completion of the removal job, the Meter Worker sends a notification to the MAM that the removal is complete. The MAM then notifies the Gas Supplier that the Metering Asset has been removed. The MAM sends a notification to CDSP to confirm that the Metering Asset has been removed. The MAM receives an acknowledgement from the Gas Supplier and the CDSP in relation to the Metering Asset removal. The MAM notifies the MAP of the removal of the Metering Asset.

3. Final Conditions:

- The MAM has successfully notified the Supplier of the removal of the meter.
- MPAS has the correct information in relation to the removal of the Meter Asset.

4. Variations

- None noted.

3.3.3 MESM003 – Metering Asset Replacement / Reconfiguration

Applicant Role: MAM

1. Initial Conditions:

- The request to exchange the metering asset is sent by the registered Supplier.
- The Metering Asset is not de-energised.
- The MAM has retained evidence of the above.

2. The Scenario:

The MAM receives a request from the Gas Supplier in relation to a Metering Asset exchange. The MAM acknowledges the request from the Gas Supplier and sends a request to the Meter Worker to exchange the Metering Asset. The MAM pre-notifies the Gas Supplier of the Metering Asset exchange 48 hours ahead of the appointment, and the Gas Supplier confirms approval for the exchange to take place. The Meter Worker undertakes the exchange and notifies the MAM that the exchange is complete. The MAM notifies the Gas Supplier and the CDSP of the Metering Asset exchange, specifying to the CDSP of the MAP identity of the installed Metering Asset. The MAM notifies the old MAP of the Metering Asset removal, who acknowledges receipt of the installation notification. The MAM notifies the new MAP of the Metering Asset installation, who acknowledges receipt of the installation notification.

3. Final Conditions:

- The MAM has successfully notified the Supplier of the replaced and reconfigured meter.
- The CDSP, Supplier and the MAP (old and new) have been successfully notified of the Metering Asset replacement.

4. Variations

- None noted.

3.3.4 MESM004 – Change of MAM

Applicant Role: MAM

1. Initial Conditions:

- The Supplier has decided that it will appoint a new agent.
- The Supplier has a contract in place with the new agent and they have agreed a date on which the transfer of responsibility is to take place.
- All registration data for the Metering Points is complete and up to date with the Registration Service.
- The Supplier and gaining MAM have determined that they will not exchange the meter as part of this process.

2. The Scenario:

As Gaining MAM:
The gaining MAM receives an agent appointment request from the Gaining Supplier.
The gaining MAM receives the request and sends confirmation of appointment to the gaining Supplier. The gaining MAM requests the transfer of metering information from the losing MAM. The losing MAM responds and provides the Metering Asset information to the gaining MAM. The gaining MAM responds to receipt of the Metering Asset information.
The gaining MAM informs the MAP of the appointment notification and the MAP responds with an acknowledgment. The gaining MAM confirms back to the gaining Supplier to confirm successful transfer of Metering Asset information. The gaining Supplier confirms receipt of this information to the gaining MAM.

As Losing MAM:
The losing MAM receives the loss notification/agent de-appointment from the (losing/current) Supplier. The losing MAM receives the request and sends confirmation of de-appointment to the (losing/current) Supplier. Once the gaining MAM has been appointed, they submit a request of transfer of information to the losing MAM. The losing MAM responds to the request and provides the Metering Asset information to the gaining MAM. The gaining MAM responds to receipt of the Metering Asset information.
The losing MAM informs the MAP of the de-appointment notification and the MAP responds with an acknowledgment.

3. Final Conditions:

- The MAM has registered their appointment and confirmed this with the supplier.
- The MAM has sent metering related information (as appropriate) to the supplier and other parties.

4. Variations

- Prior to the Consumer deciding to contract with a new Gas Supplier, the Consumer may request a bespoke quotation which requires the Gas Supplier to determine transportation, metering and supply costs.
- Supplementary information may be sent where required by the Losing MAM after the Metering Asset Information has been provided.
- The Supplier or gaining MAM may determine that a meter exchange is required, for example in the instance of a customer appointed MAM. In this case the additional steps set out in the Schedule 14 - Metering Operations section 12.5 are required.

- This scenario can take place concurrently with a switch, or as required as commercial relationships change.

3.4 Market Scenarios Applicable To Safe Isolator Providers (SIPs)

3.4.1 MESSIP001 – SIP Works Completed

Applicant Role: SIP

1. Initial Conditions:
- The Metering Point is energised.
- The Customer contracts directly with the Safe Isolation Provider to provide Safe Isolation Services.

2. Scenario:

The Safe Isolation Provider (SIP) arrives on the customer's site and conducts a risk assessment. After confirming it is safe to carry out the intended works, the Meter Point is successfully de-energised and subsequently re-energised on the same day. The SIP notifies the Supplier of the completed SIP Works through the D0396 data flow.

3. Final Conditions:
- SIP Works are completed and the Meter Point has been successfully re-energised.
- The SIP has updated internal records and has also notified the Supplier of the outcome of the SIP Works.

4. Variations
- The SIP Works are being completed on a Smart Meter; despite the SIP Works being completed successfully, the SIP cannot re-establish the same level of Smart Meter communications, and reports this to the Supplier via a D0002 flow.

3.4.2 MESSIP002 – SIP Works Completed, Potential Tampering

Applicant Role: SIP

1. Initial Conditions:

- The Metering Point is energised.
- The Customer contracts directly with the Safe Isolation Provider to provide Safe Isolation Services.

2. Scenario:

The SIP arrives on the site, and upon initial inspection, identifies apparent evidence of deliberate tampering or interference to the supply. The SIP gathers evidence of the apparent tampering and determines whether it can safely carry out the SIP Works. The SIP determines the meter is not hazardous (and does not reasonably believe it may become hazardous), so successfully de-energised and subsequently re-energised the Meter Point.

After successful completion, a D0396 flow is generated to confirm job's completion and is sent through to the Electricity Supplier. The SIP complies with the relevant provisions of the Unbilled Energy Code of Practice Schedule and sends a D0136 flow to report the suspected tampering to the registered Supplier. Any evidence retained from the work executed is attached to this data flow.

3. Final Conditions:

- SIP Works are completed and the Meter Point has been successfully re-energised.
- The SIP has updated internal records and has also notified the Supplier of the outcome of the SIP Works.
- The SIP has notified the relevant parties of suspected tampering, as well as reporting any evidence.

4. Variations

- None noted.

3.4.3 MESSIP003 – SIP Works Not Completed, Potential Hazard

Applicant Role: SIP

1. Initial Conditions:
- The Metering Point is energised.
- The Customer contracts directly with the Safe Isolation Provider to provide Safe Isolation Services.

2. Scenario:
The SIP arrives on the site and successfully de-energises the Meter Point. Upon initial inspection, the SIP does not identify any safety issues with the DNO or metering equipment. The SIP therefore de-energises the Meter Point, however whilst completing the work the SIP reasonably believes the Meter Point may become hazardous and is unable to successfully re-energise the Meter Point.

The SIP records that the works have been aborted and sends a D0139 flow to document the change in energisation status as well as a D0002 flow to report the fault to the Electricity Supplier.

The Supplier sends the SIP a D0002 flow in response, confirming the reported issue has been remedied, and the SIP reschedules the planned SIP Works.

3. Final Conditions:
- The SIP has updated internal records and has also notified the Supplier that SIP Works were unable to be successfully re-energised, including evidence.
- The Supplier returns a report as a confirmation that the remedial work has taken place (where required).
- The SIP has rescheduled the SIP Works with the Consumer.

4. Variations
- None noted.

3.4.4 MESSIP004 – SIP Works Not Completed, DNO Equipment Defect (Cat B)

Applicant Role: SIP

1. Initial Conditions:

- The Metering Point is energised.
- The Customer contracts directly with the Safe Isolation Provider to provide Safe Isolation Services.

2. Scenario:

The SIP attends the site and performs a risk assessment, leading to the identification of a DNO equipment defect. By consulting the 'Guidance for Service Termination Issue Reporting' document, the SIP accurately classifies this defect as a Category B remedial work condition. The SIP therefore does not start the SIP Works, and the job is then aborted after the supply is made safe.

The SIP ensures evidence of this defect is retained and reports it to the DNO (in the DNO's role as the Supply Fault Information Centre) via data flow D0135. The SIP subsequently receives a response via flow D0126, which outlines the findings of the Category B investigation, allowing the SIP's work to be rescheduled. The SIP contacts the Consumer to re-schedule the SIP Works, however the Consumer does not wish to proceed at this time.

3. Final Conditions:

- The fault is reported to the DNO (in the DNO's role as the SFIC).
- The SIP has received an outcome which could enable SIP Works to now take place.
- The SIP does not reschedule the SIP Works.

4. Variations

- None noted.

3.4.5 MESSIP005 – SIP Works Not Completed, DNO Equipment Defect (Cat A)

Applicant Role: SIP

1. Initial Conditions:

- The Metering Point is energised.
- The Customer contracts directly with the Safe Isolation Provider to provide Safe Isolation Services.

2. Scenario:

The SIP attends the site and performs a risk assessment, leading to the identification of a DNO equipment defect. By consulting the 'Guidance for Service Termination Issue Reporting' document, the SIP accurately classifies this defect as a Category A remedial work condition, necessitating the immediate abortion of the job and securing of the situation.

The SIP subsequently receives a response via flow D0126, which outlines the findings of the Category A investigation, allowing the SIP's work to be safely rescheduled. Following this, the SIP will return to the premise to complete the SIP Works, subsequently issuing a D0396 to confirm the SIP's work completion.

3. Final Conditions:

- The fault is reported to the DNO (in the DNO's role as the SFIC).
- The SIP has received an outcome which could enable SIP Works to now take place.
- The SIP successfully completes the work after receiving confirmation of the fix from the DNO.

4. Variations

- None noted.



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