

# CURRENCIES AND INTEREST RATE

Conformance Document:

V1.03

March 2025

# 1. DOCUMENT CONTROL

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## 1.2. Document Information

|                      |            |
|----------------------|------------|
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## 1.3 Revision History

| Version              | Date                       | Description   |
|----------------------|----------------------------|---|
| 1.00                 | September 2024             | Initial Release   |
| 1.01                 | November 2024              | Updated Reporting a Repo – 5.1  |
| 1.02                 | January 2025               | Updated Cancel a Repo – 6.7   |
| <a href="#">1.03</a> | <a href="#">March 2025</a> | <a href="#">Updated Key Repos API Processes – 5.1, 5.2 &amp; 5.3.</a><br><a href="#">Updated UnconfirmedOrder – 6.2</a> |

## 1.4 References

| Name  | Description  |
|---|--|
| JSE Interest Rates and Currency Derivatives API Specification Version: 3.1Rev13 | Indicates the changes necessary to accommodate the functionality for the Nutron Bonds Repo Project |

## 1.5 Contact Details

|   |   |
|---|---|
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## 1.6 Terms/Acronyms and Definitions

| Abbreviation | Explanation                       |
|--------------|-----------------------------------|
| API          | Application Programming Interface |
| JSE          | Johannesburg Stock Exchange       |
| TSPs         | Trading Service Participants      |
| IRD          | Interest Rates and Derivatives    |
| CTA          | Conformance Test Analyst          |
| CTS          | Customer Testing Service          |

## **2. OVERVIEW**

This document aims to equip clients with comprehensive and essential information regarding NUTRON REPO REFORM Conformance Testing for the IRD and Bond Market.

The JSE Conformance Test Service enables clients to validate the integration of their systems with the JSE's architecture. These tests encompass various functional areas and confirm that client systems can effectively interact and operate as intended within the core framework. They include common events encountered during daily trading activities, as well as those that occur less frequently.

To align South Africa's financial markets with global standards, the JSE has initiated reforms in the current Repos market, which has been lagging in comparison to international practices. The specific products involved in these reforms are detailed in a separate document, referenced in the related documents section.

## **3. SERVICE OVERVIEW**

Clients must ensure that all software applications intended for connection to the production environment are fully conformed. The self-conformance policy has been established to streamline and support this process.

Mandatory testing is required for all essential functions to verify compliance with the Services Documentation. Applications requiring conformance include any interfaces that will directly connect to Nutron for the IRD and Bond Markets.

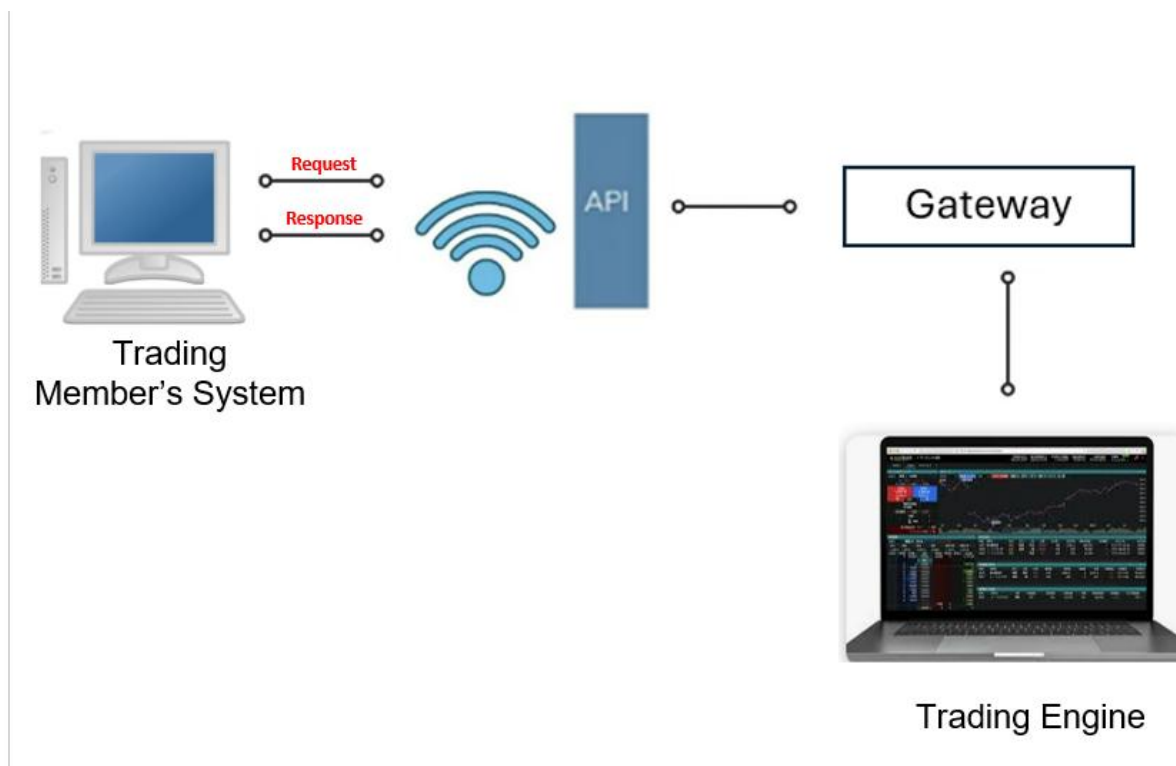
### **3.1 Conformance Test Environment**

Conformance testing will take place within the existing Customer Testing Service environment. Before the conformance testing service begins, the JSE conducts a thorough readiness assessment of its central systems and networks to ensure that client testing occurs in a stable and reliable environment.

Clients are encouraged to perform a similar self-assessment to maximize the efficiency of their allocated testing sessions and to avoid causing disruptions to other participants. The JSE will confirm a client's readiness for the conformance testing service during the mandatory technical readiness test to CTS, which is required for all participating clients.

### 3.2 Mandatory Testing for Trading Interfaces

The Nutron solution for the IRD and Bond Markets serves as the primary interface for trading, providing clients with access to the production environment. The diagram below illustrates how clients connect to the Nutron solution. Trading Service Participants, also referred to as Members, are required to evaluate the reporting and download functionalities associated with the newly introduced Classic and Tri-Party Repos.



### 3.3 Conformance Test Process

The conformance test process is as follows:

1. Prior to conformance, clients must complete and submit the Conformance Test Report, which outlines the functions supported by the software application being tested and defines the scope of the required conformance test.
2. Once the Conformance Test Report is approved by the JSE, clients may proceed to book a conformance slot.
3. Conformance slot bookings must be arranged through the JSE Client Services Centre team.
4. Conformance test slots are available weekly on JSE business days: Tuesdays, Wednesdays, and Thursdays. Slots will not be available on public holidays that fall on these days.

5. A booking is essential to ensure a Conformance Test Analyst is assigned to the test. Clients are expected to perform self-conformance tests independently and should only involve the CTA when they are satisfied with their results and require support or assistance with the end-of-test report.
6. Each client is limited to booking one conformance slot per week.
7. All self-conformance tests must be completed within one JSE business day.
8. Conformance tests requiring CTA support must take place during JSE business hours (07h00 – 19h00 SAST). If these tests cannot be completed within the same business day, the CTA will assist the client on the next business day.
9. Results of conformance tests will be available within 24 to 48 hours following successful processing of the end-of-test report.
10. Clients who fail a conformance test are required to repeat the entire test.
11. Throughout the conformance tests, clients must remain logged in and connected to the service. Disconnecting without prior instructions as part of the test or deviating from test activities will result in a conformance failure.

### **3.4 Conformance Test Report**

The Conformance Test Report is an electronic document that clients must complete and submit to the JSE prior to undergoing conformance testing. Clients are required to:

1. Complete and submit the Conformance Test Report to the JSE before conformance, detailing the scope of functionality for their software application.
2. Ensure that the functionality of their software application is reviewed and agreed upon with the JSE.
3. Update the approved Conformance Test Report with the results of their self-conformance tests and return the updated report to the JSE as part of the conformance testing process.

For further details, please refer to the IRD Conformance Report.

### **3.5 Conformance Policy**

It is mandatory for all software applications intended for connection to the production environment to undergo conformance. Any modifications to conformed software will necessitate a mandatory conformance test for the updated version.

Additionally, the introduction of new functionality by the JSE may also require mandatory conformance testing, although not all releases will necessitate it. The JSE will confirm on a case-by-case basis whether conformance is required for each release.

Mandatory conformance is required for any new release implemented by the JSE unless explicitly stated otherwise. Similarly, any changes made to conformed software will require mandatory conformance unless alternative arrangements are agreed upon with the JSE.

### **3.6 Conformance Test Pricing**

For details on pricing, please reach out to the JSE Client Services Centre

## **4. CONFORMANCE TEST SCENARIOS**

Outlined below are the required tests that clients must successfully complete to pass a conformance test.

Each step within a given scenario applies to all Trading Service Participants, also known as Members. Clients are expected to execute each step as documented and accurately record the results in the Conformance Test Report. It is the client's responsibility to ensure all relevant and accurate information is provided for each execution step in the test report, as any inaccuracies will result in a failed conformance test.

If the actual result of a step differs from the expected outcome, clients must document the attained result in the Conformance Test Report and include all relevant information to uniquely identify the step (e.g., Member Code, Principal Code, Dealer Code, etc.).

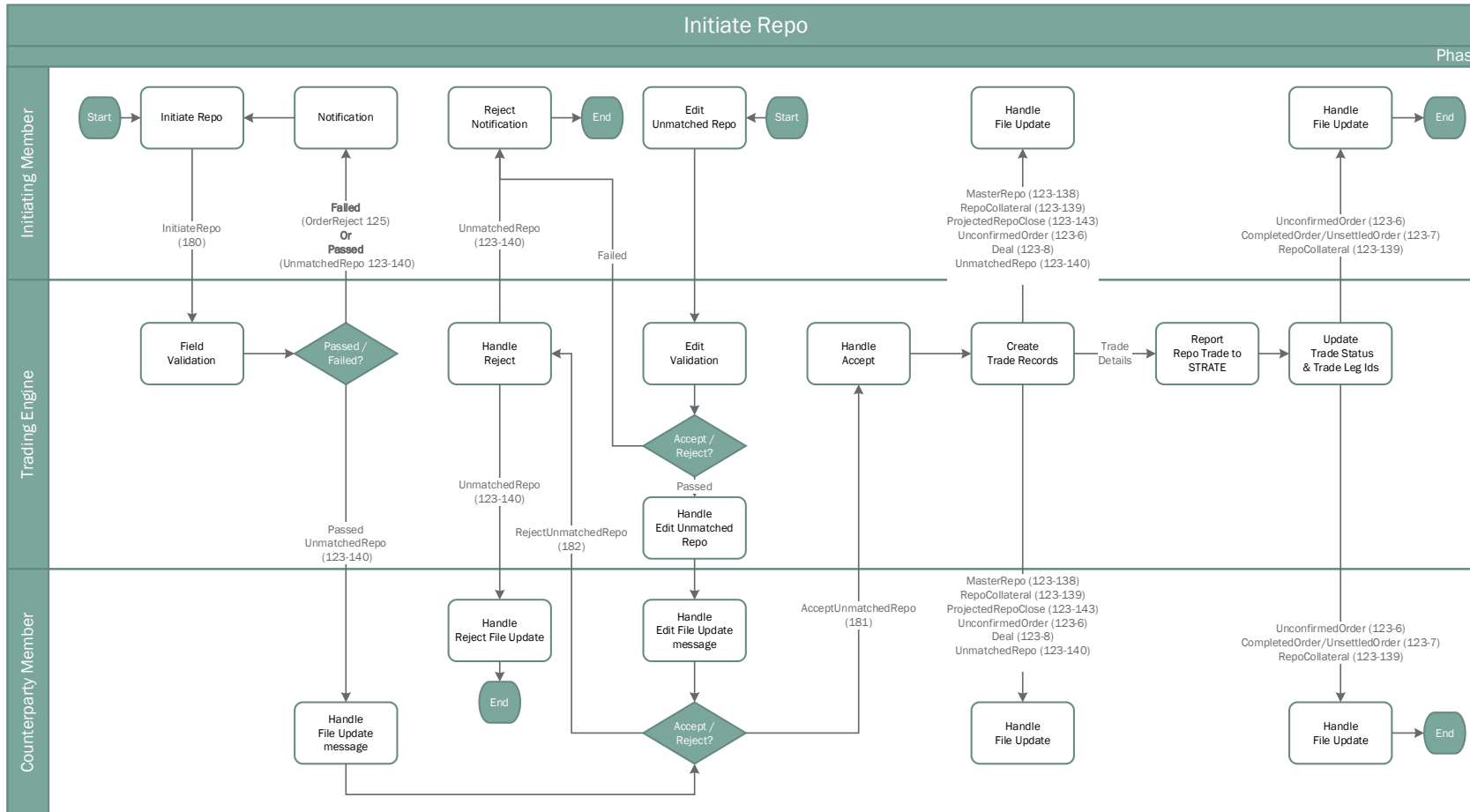
Clients must remain connected and logged in throughout the testing process and should only disconnect or log off when instructed as part of the execution test. Non-compliance with this requirement will lead to a conformance failure.

All test scenarios are classified as self-conformance.

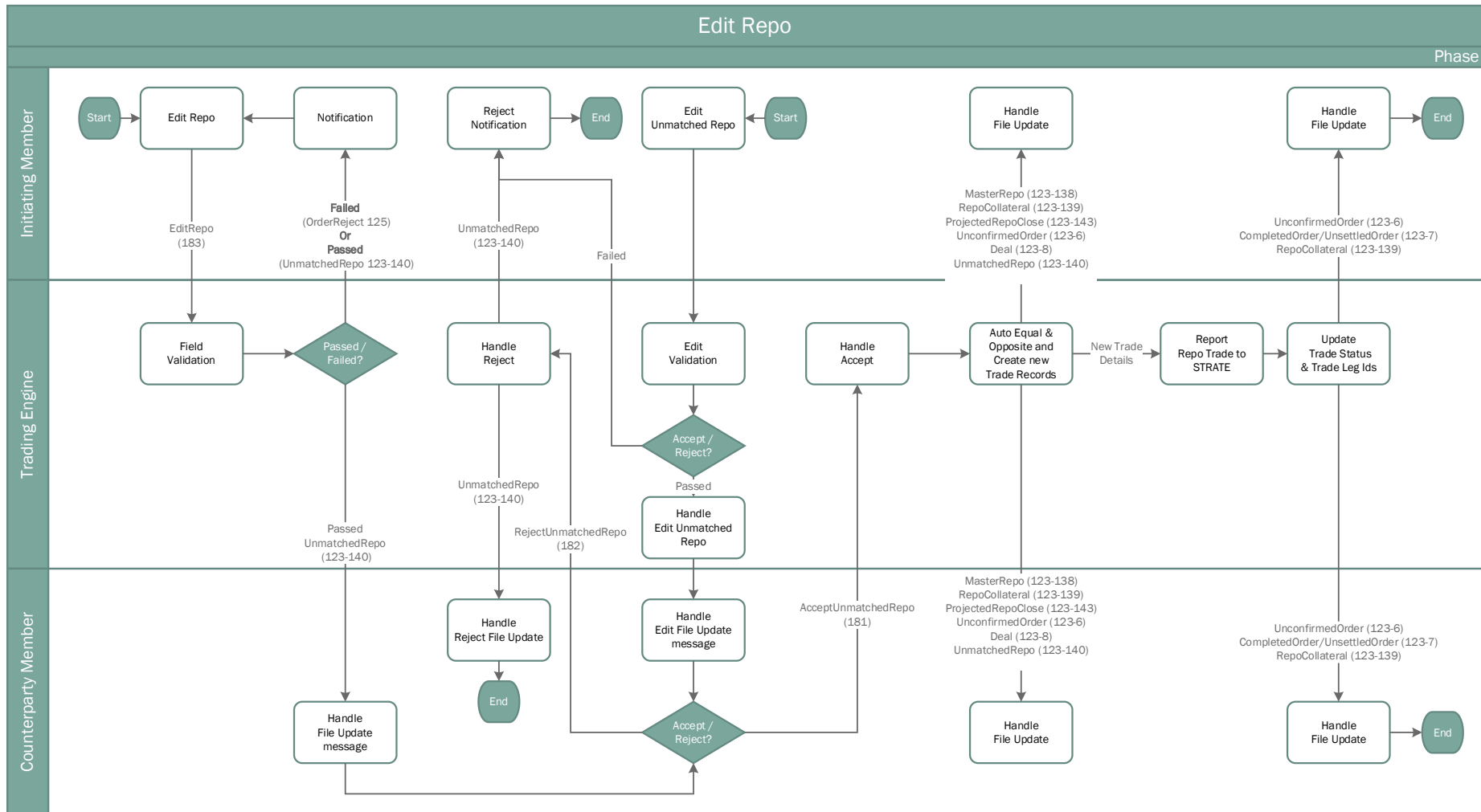


# 5. KEY API PROCESSES AND MESSAGES

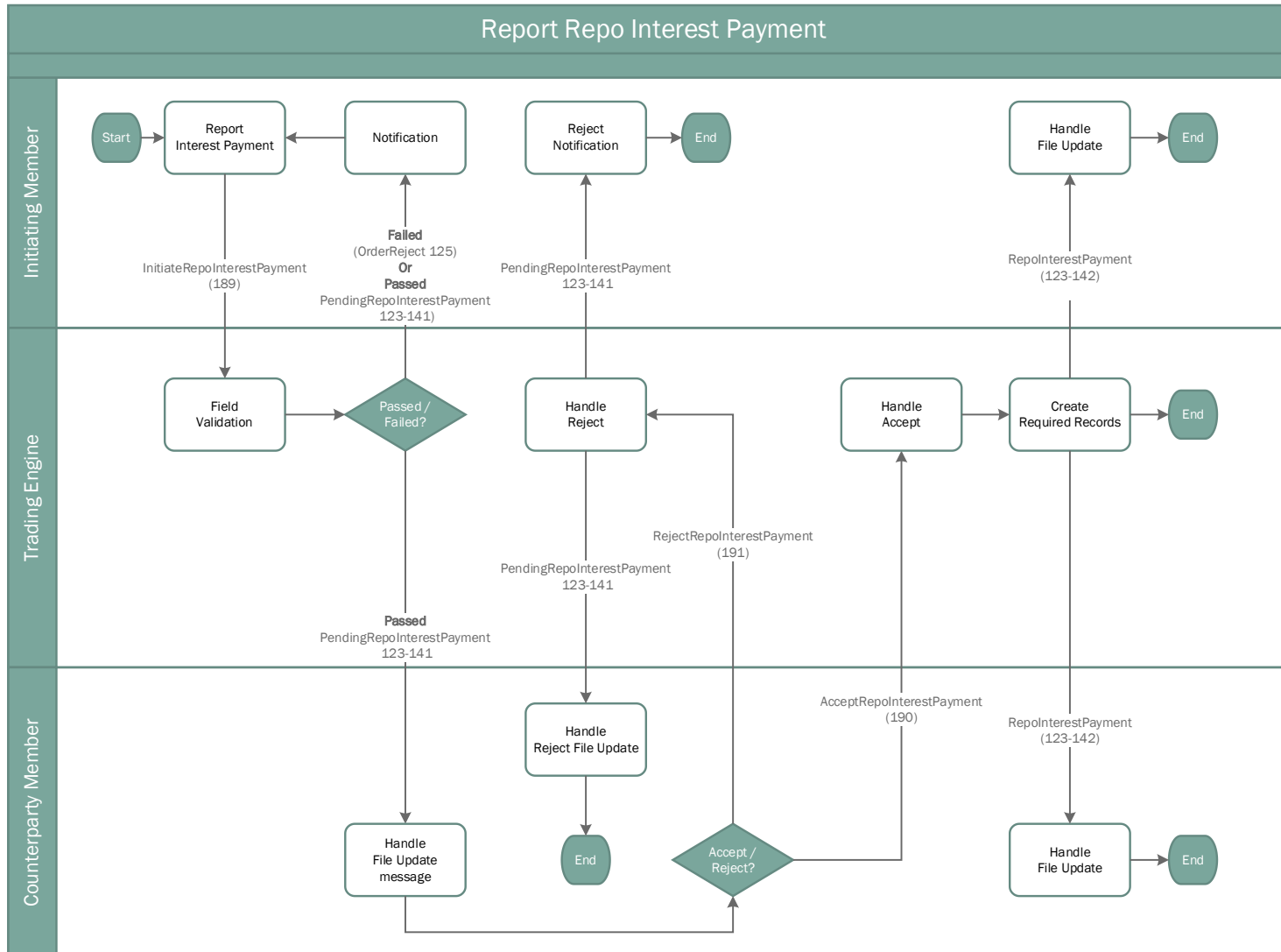
## 5.1 Reporting a Repo



## 5.2 Editing a Repo



### 5.3 Reporting a Repo Interest Payment



## 5.4 New Message Structures

All data structures will be delivered upon the submission of the appropriate message type. Response messages will be generated intra-day as part of 123 messages and provided in a file download format. Details regarding the format of the download messages are outlined in Section 9.61 – 9.70 [API document](#).

Below is a table with all messages that have been added to the API.

| Message Type No              | File Identifier | Message                     |
|------------------------------|-----------------|-----------------------------|
| <b>Classic Repo</b>          |                 |                             |
| 180                          |                 | InitiateRepo                |
| 181                          |                 | AcceptUnmatchedRepo         |
| 182                          |                 | RejectUnmatchedRepo         |
| 183                          |                 | EditRepo                    |
| 184                          |                 | SubstituteRepo              |
| 185                          |                 | CloseRepo                   |
| 186                          |                 | CancelRepo                  |
| 187                          |                 | CancelUnmatchedRepo         |
| 188                          |                 | EditUnmatchedRepo           |
| <b>Repo Interest Payment</b> |                 |                             |
| 189                          |                 | InitiateRepoInterestPayment |

|                                |     |                                  |
|--------------------------------|-----|----------------------------------|
| 190                            |     | AcceptRepoInterestPayment        |
| 191                            |     | RejectRepoInterestPayment        |
| 192                            |     | CancelPendingRepoInterestPayment |
| <b>Tri-Party</b>               |     |                                  |
| 193                            |     | InitiateTripartyRepo             |
| 194                            |     | EditUnmatchedTripartyRepo        |
| 195                            |     | CancelUnmatchedTripartyRepo      |
| 196                            |     | AcceptUnmatchedTripartyRepo      |
| 197                            |     | RejectUnmatchedTripartyRepo      |
| 198                            |     | EditTripartyRepoStructure        |
| <b>Response File Downloads</b> |     |                                  |
| 123                            | 138 | MasterRepo                       |
| 123                            | 139 | RepoCollateral                   |
| 123                            | 140 | UnmatchedRepo                    |
| 123                            | 141 | PendingRepoInterestPayment       |
| 123                            | 142 | RepoInterestPayment              |



|     |     |                       |
|-----|-----|-----------------------|
| 123 | 143 | ProjectedRepoClose    |
| 123 | 144 | UnmatchedTripartyRepo |
| 123 | 145 | TripartyDeal          |
| 36  | 146 | CollateralBasket      |

Table 1. New Message Structures

## 6. Classic Repos and Triparty Trading Conformance

A repurchase agreement (Repo) is initiated when one member proposes to sell their securities to another member, and both parties agree on the terms for repurchasing those securities at a higher price at a later date.

The table below outlines the Classic types:

| RepoType | Configuration           |
|----------|-------------------------|
| Classic  | Closed                  |
|          | Closed + CollateralSwap |
|          | Open-ended              |
|          | Open-ended + Evergreen  |

## 6.1 Report Classic Repo Trade - 180

| Test Case ID  | API Gateway   | Mandatory  |
|---|---|--|
| T1-001  | Report a Classic Repo                                 | Y  |
| <b>Description:</b>   |   |  |
| A member submits a message to report a Classic Repo Trade.  |   |  |
| <b>Trigger:</b>   |   |  |
| <ul style="list-style-type: none"> <li>The member must be logged in and possess the necessary permissions and rights to submit an API message to the JSE Trading engine.</li> </ul> |   |  |
| Activity Steps  |   |  |
| #   | Test Step   | Expected Result  |
| 1   | Submit Message Type180 to report a Classic Repo trade | <ul style="list-style-type: none"> <li>Classic Repo trade submitted successfully.</li> <li>Receive a success ack (message type 123, file identifier 140)</li> </ul> <p>If the message has failed, receive announcement message type number 125</p> |
| 2   | Record the details of message type 123 - 140          |  |



## 6.2 Accept an Unmatched Classic Repo Trade - 181

| Test Case ID   | API Gateway  | Mandatory  |
|--|--|--|
| T1-002   | Accept an Unmatched Classic Repo                                 | Y  |
| <b>Description:</b>  |  |  |
| A member submits a message to accept a Classic Repo Trade.   |  |  |
| <b>Trigger:</b>  |  |  |
| <ul style="list-style-type: none"> <li>• The initiating member has reported the Repo trade.</li> <li>• The unmatched Repo trade record has been published to both the initiating member and the counterparty member</li> </ul> |  |  |
| <b>Activity Steps</b>  |  |  |
| #  | Test Step  | Expected Result  |
| 1  | Submit Message Type181 to accept an Unmatched Classic Repo trade | <ul style="list-style-type: none"> <li>- Classic Repo trade accepted successfully.</li> <li>- Both parties will receive the following message types and identifiers: <ul style="list-style-type: none"> <li>○ MasterRepo (123 – 138)</li> <li>○ RepoCollateral (123 -139)</li> <li>○ ProjectedRepoClose (123– 143)</li> <li>○ <u>UnconfirmedOrder</u> (123 – 6)</li> <li>○ Deal (123 – 8)</li> <li>○ Unmatched Repo (123 – 140)</li> </ul> </li> </ul> |





|   |   |  |
|---|---|--|
|   |   | <p>If the message has failed, receive announcement message type number 125.</p> <p>The trade legs will have a status of “Unconfirmed” – the repo collateral record will reflect the status of the trade. Once the trade legs are confirmed by Strate, the match references and the status of the trades are updated.</p> |
| 2 | Record the details of all the response message types. |  |

### 6.3 Reject an Unmatched Classic Repo Trade - 182

| Test Case ID  | API Gateway  | Mandatory   |
|---|--|---|
| T1-003  | Reject an Unmatched Classic Repo                                   | Y   |
| <b>Description:</b>   |  |   |
| A member submits a message to reject an unmatched Classic Repo Trade.   |  |   |
| <b>Trigger:</b>   |  |   |
| <ul style="list-style-type: none"> <li>• The initiating member has reported the Repo trade.</li> <li>• The message has been shared with both the initiator and the counterparty members.</li> </ul> |  |   |
| <b>Activity Steps</b>   |  |   |
| #   | Test Step  | Expected Result   |
| 1   | Submit Message Type 182 to reject an Unmatched Classic Repo trade. | <ul style="list-style-type: none"> <li>- Classic Repo trade rejection submitted successfully.</li> <li>- Receive a success ack (message type 123, file identifier 140)</li> </ul> |



|   |   |  |
|---|---|--|
|   |   | If the message has failed, receive announcement message type number 125. |
| 2 | Record the details of all the response message types. |  |

#### 6.4 Edit Classic Repo Trade - 183

| Test Case ID  | API Gateway   | Mandatory   |
|---|---|---|
| T1-004  | Edit a matched Classic Repo   | Y   |
| <b>Description:</b>   |   |   |
| A member submits a message to edit a matched Classic Repo Trade.  |   |   |
| <b>Trigger:</b>   |   |   |
| <ul style="list-style-type: none"> <li>The Repo has been successfully matched, and the trade legs have been updated with the status "Unsettled."</li> </ul> |   |   |
| <b>Activity Steps</b>   |   |   |
| #   | Test Step   | Expected Result   |
| 1   | Submit Message Type 183 to amend the values of a matched Classic Repo trade.<br><br>The Edit Repo message manages the following edits:<br><br>(a) Re-rate | <ul style="list-style-type: none"> <li>Classic Repo trade edit message submitted successfully.</li> <li>Receive a success ack (message type 123, file identifier 140)</li> </ul> If the message has failed, receive announcement message type number 125. |



|   |  |  |
|---|--|--|
|   | (b) Extension of the termination date<br><br>(c) Reporting of Interest rate payment + Rerate<br><br>(d) Reporting of Interest rate payment + Extension |  |
| 2 | Record the details of all the response message types.  |  |

## 6.5 Substitute A Collateral - 184

| Test Case ID  | API Gateway             | Mandatory       |
|---|-------------------------|-----------------|
| T1-005  | Substitute a Collateral | Y               |
| <p><b>Description:</b></p> <p>A member submits a message to replace existing collateral with another instrument of equal or greater value. A member may substitute a Repo with a single instrument multiple times; however, the system permits substitution of a Repo with multiple instruments (up to a maximum of 3) only once. A single collateral can be replaced by multiple instruments, provided their combined value is equal to or higher than the original.</p> |                         |                 |
| <p><b>Trigger:</b></p> <ul style="list-style-type: none"> <li>The Repo has been matched, and the trade legs have been updated with the status "Unsettled."</li> </ul>   |                         |                 |
| <p><b>Activity Steps</b></p>  |                         |                 |
| #   | Test Step               | Expected Result |

|   |  |  |
|---|--|--|
| 1 | Submit Message Type 184 to substitute a single / multiple instruments. | <ul style="list-style-type: none"> <li>- New single / multiple collateral(s) substituted successfully.</li> <li>- Receive a success ack (message type 123, file identifier 140)</li> </ul> <p>If the message has failed, receive announcement message type number 125.</p> |
| 2 | Record the details of all the response message types.                  |  |

## 6.6 Close a Repo – 185

| Test Case ID  | API Gateway  | Mandatory  |
|---|--|--|
| T1-006  | Close a Repo   | Y  |
| <b>Description:</b>   |  |  |
| A member submits a message to terminate an Open-ended or Evergreen Classic Repo on a specified date.  |  |  |
| <b>Trigger:</b>   |  |  |
| <ul style="list-style-type: none"> <li>• The Repo has been matched, and the trade legs have been updated with the status "Unsettled."</li> <li>• The Repo does not have a specified closing date.</li> <li>• The notice period has been recorded if the Repo is classified as Evergreen.</li> </ul> |  |  |
| <b>Activity Steps</b>   |  |  |
| #   | Test Step  | Expected Result  |
| 1   | Submit Message Type 185 to close an Open-ended / Evergreen Classic Repo. | <ul style="list-style-type: none"> <li>- The closing date of the Open-ended / Evergreen Classic Repo is saved successfully.</li> </ul> |

|   |   |   |
|---|---|---|
|   |   | <ul style="list-style-type: none"> <li>- Receive a success ack (message type 123, file identifier 140)</li> </ul> <p>If the message has failed, receive announcement message type number 125.</p> |
| 2 | Record the details of all the response message types. |   |

## 6.7 Cancel a Repo – 186

| Test Case ID  | API Gateway   | Mandatory       |
|---|---------------|-----------------|
| T1-007  | Cancel a Repo | Y               |
| <p><b>Description:</b></p> <p>The initiating member submits a message to cancel a Classic Repo that has not yet settled. If the initiation leg (R1) has already settled, the cancellation request will be rejected. If a cancellation reason is provided, it will be displayed to both parties.</p> |               |                 |
| <p><b>Trigger:</b></p> <ul style="list-style-type: none"> <li>• The initiating member has reported the Repo trade, and the message has been shared with both parties.</li> <li>• The initiation leg (R1) has not been settled.</li> </ul>   |               |                 |
| Activity Steps  |               |                 |
| #   | Test Step     | Expected Result |

|   |   |   |
|---|---|---|
| 1 | Submit Message Type 186 to cancel a Classic Repo.     | <ul style="list-style-type: none"> <li>- The cancellation of a Classic Repo saved successfully.</li> <li>- The record deleted end of day.</li> <li>- Receive a success ack (message type 123, file identifier 140)</li> </ul> <p>If the message has failed, receive announcement message type number 125.</p> |
| 2 | Record the details of all the response message types. |   |

## 6.8 Cancel an Unmatched Repo – 187

| Test Case ID   | API Gateway                       | Mandatory |
|--|-----------------------------------|-----------|
| T1-008   | Cancellation of an unmatched Repo | Y         |
| <b>Description:</b>  |                                   |           |
| <p>The initiating member submits a message to cancel pending changes that require approval from the counterparty of an unmatched Classic Repo. If a cancellation reason is provided, it will be displayed to both parties.</p> |                                   |           |
| <b>Trigger:</b>  |                                   |           |
| <ul style="list-style-type: none"> <li>• The initiating member has reported the Repo trade, and the message has been shared with both parties.</li> <li>• The initiation leg (R1) remains unsettled.</li> </ul>                |                                   |           |
| <b>Activity Steps</b>  |                                   |           |

| # | Test Step  | Expected Result  |
|---|--|--|
| 1 | Submit Message Type 187 to cancel an unmatched Classic Repo. | <ul style="list-style-type: none"> <li>- The cancellation of an unmatched Classic Repo saved successfully.</li> <li>- The record deleted end of day.</li> <li>- Receive a success ack (message type 123, file identifier 140)</li> </ul> <p>If the message has failed, receive announcement message type number 125.</p> |
| 2 | Record the details of all the response message types.        |  |

## 6.9. Edit an Unmatched Repo – 188

| Test Case ID   | API Gateway            | Mandatory |
|--|------------------------|-----------|
| T1-009   | Edit an Unmatched Repo | Y         |
| <p><b>Description:</b></p> <p>A member submits a message to edit an unmatched Classic Repo where the initiation leg (R1) remains unsettled. Following the edit, the status of the unmatched Classic Repo will be updated to "Pending," signifying that the request is awaiting approval from the counterparty.</p> |                        |           |
| <p><b>Trigger:</b></p> <ul style="list-style-type: none"> <li>• The initiating member has reported the Repo trade, and the message has been shared with both parties.</li> <li>• The initiation leg (R1) has not been settled.</li> </ul>  |                        |           |

| Activity Steps |  |   |
|----------------|--|---|
| #              | Test Step  | Expected Result   |
| 1              | Submit Message Type 188 to edit an unmatched Classic Repo. | <ul style="list-style-type: none"> <li>- The amendment of an unmatched Classic Repo saved successfully.</li> <li>- Receive a success ack (message type 123, file identifier 140)</li> </ul> <p>If the message has failed, receive announcement message type number 125.</p> |
| 2              | Record the details of all the response message types.      |   |

### 6.10 Report a Repo interest payment – 189

| Test Case ID  | API Gateway                    | Mandatory |
|---|--------------------------------|-----------|
| T1-0010   | Report a Repo interest payment | Y         |
| <p><b>Description:</b></p> <p>An initiating member submits a message to report a Repo interest rate payment agreed upon by both parties. The pending payment record is sent to the counterparty for acceptance or rejection. After editing an unmatched Classic Repo, the status will change to "Pending," indicating that the request requires approval from the counterparty.</p> |                                |           |
| <p><b>Trigger:</b></p> <ul style="list-style-type: none"> <li>• The Repo has been matched, and the trade legs have been updated with the status "Unsettled."</li> </ul>   |                                |           |
| Activity Steps  |                                |           |



| # | Test Step   | Expected Result  |
|---|---|--|
| 1 | Submit Message Type 189 to report a Repo interest payment | <ul style="list-style-type: none"> <li>- The interest payment value and payment date submitted successfully.</li> <li>- Receive a success ack (message type 123, file identifier 140)</li> </ul> <p>If the message has failed, receive announcement message type number 125.</p> |
| 2 | Record the details of all the response message types.     |  |

### 6.11 Accept a Repo interest payment – 190

| Test Case ID  | API Gateway                    | Mandatory       |
|---|--------------------------------|-----------------|
| T1-0011   | Accept a Repo interest payment | Y               |
| <p><b>Description:</b></p> <p>The counterparty submits a message to accept the agreed-upon interest rate payment reported by both parties. The cumulative value of all interest payments made throughout the duration of the Classic Repo will be subtracted from the interest amount calculated at the Repo's closure.</p> |                                |                 |
| <p><b>Trigger:</b></p> <ul style="list-style-type: none"> <li>• The Repo interest payment has been successfully reported.</li> <li>• The status of the Repo interest rate payment is pending, awaiting acceptance from the counterparty.</li> </ul>   |                                |                 |
| <p><b>Activity Steps</b></p>  |                                |                 |
| #   | Test Step                      | Expected Result |

|   |   |  |
|---|---|--|
| 1 | Submit Message Type 190 to accept a Repo interest payment | <ul style="list-style-type: none"> <li>- The interest payment value and payment date saved successfully.</li> <li>- Receive a success ack (message type 123, file identifier 140)</li> </ul> <p>If the message has failed, receive announcement message type number 125.</p> |
| 2 | Record the details of all the response message types.     |  |

## 6.12 Reject a Repo interest payment – 191

| Test Case ID  | API Gateway   | Mandatory  |
|---|---|--|
| T1-0012   | Reject a Repo interest payment                            | Y  |
| <b>Description:</b>   |   |  |
| A counterparty member submits a message to reject the reported interest rate payment.   |   |  |
| <b>Trigger:</b>   |   |  |
| <ul style="list-style-type: none"> <li>• The Repo interest payment has been successfully reported.</li> <li>• The status of the Repo interest rate payment is pending and awaiting acceptance by the counterparty.</li> </ul> |   |  |
| <b>Activity Steps</b>   |   |  |
| #   | Test Step   | Expected Result  |
| 1   | Submit Message Type 191 to reject a Repo interest payment | <ul style="list-style-type: none"> <li>- The interest payment record rejection submitted successfully.</li> <li>- The record deleted at end of day.</li> </ul> |

|   |   |  |
|---|---|--|
|   |   | <ul style="list-style-type: none"> <li>- Receive a success ack (message type 123, file identifier 140).</li> </ul> <p>If the message has failed, receive announcement message type number 125.</p> |
| 2 | Record the details of all the response message types. |  |

### 6.13 Cancel a pending Repo interest payment – 192

| Test Case ID  | API Gateway   | Mandatory  |
|---|---|--|
| T1-0012   | Cancel a pending Repo interest payment                    | Y  |
| <b>Description:</b>   |   |  |
| The initiating member submits a message to cancel a previously reported interest rate payment.  |   |  |
| <b>Trigger:</b>   |   |  |
| <ul style="list-style-type: none"> <li>• The Repo interest payment has been successfully reported.</li> <li>• The status of the Repo interest rate payment is pending and awaiting acceptance from the counterparty.</li> </ul> |   |  |
| <b>Activity Steps</b>   |   |  |
| #   | Test Step   | Expected Result  |
| 1   | Submit Message Type 192 to reject a Repo interest payment | <ul style="list-style-type: none"> <li>- The interest payment record rejection submitted successfully.</li> <li>- The record deleted at end of day.</li> </ul> |



|   |   |  |
|---|---|--|
|   |   | <ul style="list-style-type: none"> <li>- Receive a success ack (message type 123, file identifier 140).</li> </ul> <p>If the message has failed, receive announcement message type number 125.</p> |
| 2 | Record the details of all the response message types. |  |

#### 6.14 Report a Tri-Party Repo – 193

| Test Case ID  | API Gateway  | Mandatory  |
|---|--|--|
| T1-0014   | Reporting a Triparty Repo                          | Y  |
| <b>Description:</b>   |  |  |
| <p>The initiating member submits a message to report a Tri-party trade at the JSE. The reported Tri-party trade is then submitted to Strate for collateral management. A Tri-party trade may be either open-ended or fixed.</p>                           |  |  |
| <b>Trigger:</b>   |  |  |
| <ul style="list-style-type: none"> <li>• Members must already have an existing basket in the system.</li> <li>• The Collateral Basket for the Tri-party trade must have been downloaded as part of the reference data at the start of trading.</li> </ul> |  |  |
| <b>Activity Steps</b>   |  |  |
| #   | Test Step  | Expected Result  |
| 1   | Submit Message Type 193 to report a Tri-Party Repo | <ul style="list-style-type: none"> <li>- Classic Repo trade submitted successfully.</li> </ul> |



|   |   |  |
|---|---|--|
|   |   | <ul style="list-style-type: none"> <li>- Receive a success ack (message type 123, file identifier 140).</li> </ul> <p>If the message has failed, receive announcement message type number 125.</p> |
| 2 | Record the details of all the response message types. |  |

### 6.15 Edit an Unmatched Tri-Party Repo – 194

| Test Case ID  | API Gateway  | Mandatory   |
|---|--|---|
| T1-0015   | Editing an unmatched Triparty Repo                                     | Y   |
| <p><b>Description:</b></p> <p>A member submits a message to edit an unmatched Tri-Party Repo where the initiation leg (R1) remains unsettled. Once the edit is completed, the status of the unmatched Tri-Party Repo will change to "Pending," signifying that the request awaits approval from the counterparty.</p> |  |   |
| <p><b>Trigger:</b></p> <ul style="list-style-type: none"> <li>• The initiating member has reported the Tri-Party Repo trade, and the message has been shared with both parties.</li> <li>• The initiation leg (R1) has not been settled.</li> </ul>   |  |   |
| <p><b>Activity Steps</b></p>  |  |   |
| #   | Test Step  | Expected Result   |
| 1   | Submit Message Type 194 to edit a Tri-Party Repo that has not matched. | <ul style="list-style-type: none"> <li>- New values of an unmatched Tri-party Repo trade submitted successfully.</li> </ul> |



|   |   |  |
|---|---|--|
|   |   | <ul style="list-style-type: none"> <li>- Receive a success ack (message type 123, file identifier 140).</li> </ul> <p>If the message has failed, receive announcement message type number 125.</p> |
| 2 | Record the details of all the response message types. |  |

### 6.16 Cancel an Unmatched Tri-Party Repo – 195

| Test Case ID  | API Gateway  | Mandatory   |
|---|--|---|
| T1-0016   | Cancellation of an unmatched Triparty Repo                             | Y   |
| <b>Description:</b><br><br>The initiating member sends a message to cancel pending changes requiring approval from the counterparty of an unmatched Tri-Party Repo. If provided, the cancellation reason will be displayed to both parties. |  |   |
| <b>Trigger:</b> <ul style="list-style-type: none"> <li>• The unmatched Tri-Party Repo trade has been successfully submitted, and the record has been shared with both the initiating and counterparty members.</li> </ul>                   |  |   |
| <b>Activity Steps</b>   |  |   |
| #   | Test Step  | Expected Result   |
| 1   | Submit Message Type 195 to edit a Tri-Party Repo that has not matched. | <ul style="list-style-type: none"> <li>- The cancellation of an unmatched Tri-Party Repo saved successfully.</li> <li>- The record deleted end of day.</li> </ul> |



|   |   |   |
|---|---|---|
|   |   | <ul style="list-style-type: none"> <li>- Receive a success ack (message type 123, file identifier 140)</li> </ul> <p>If the message has failed, receive announcement message type number 125.</p> |
| 2 | Record the details of all the response message types. |   |

### 6.17 Accept an Unmatched Tri-Party Repo – 196

| Test Case ID   | API Gateway  | Mandatory  |
|--|--|--|
| T1-0016  | Accepting an unmatched Triparty Repo                                   | Y  |
| <b>Description:</b>  |  |  |
| The counterparty member sends a message to accept an unmatched Tri-Party Repo.   |  |  |
| <b>Trigger:</b>  |  |  |
| <ul style="list-style-type: none"> <li>• The unmatched Tri-Party Repo trade has been successfully submitted, and the record has been shared with both the initiating and counterparty members</li> </ul> |  |  |
| <b>Activity Steps</b>  |  |  |
| #  | Test Step  | Expected Result  |
| 1  | Submit Message Type 196 to edit a Tri-Party Repo that has not matched. | <ul style="list-style-type: none"> <li>- The acceptance of the reported Tri-Party Repo by the Counterparty submitted successfully.</li> <li>- The status = “Pending Strate” and updated to “Strate Accepted” once acknowledgement received from Strate”</li> </ul> |



|   |   |  |
|---|---|--|
|   |   | <ul style="list-style-type: none"> <li>- Receive a success ack (message type 123, file identifier 140)</li> </ul> <p>If the message has failed, receive announcement message type number 125.</p> <ul style="list-style-type: none"> <li>- Status = "Strate Rejected" if Strate rejects the reported Tri-Party Trade.</li> </ul> |
| 2 | Record the details of all the response message types. |  |

### 6.17 Reject an Unmatched Tri-Party Repo – 197

| Test Case ID   | API Gateway  | Mandatory   |
|--|--|---|
| T1-0017  | Reject an Unmatched Tri-party Repo                                   | Y   |
| <b>Description:</b>  |  |   |
| A member submits a message to reject an unmatched Tri-Party Repo Trade.  |  |   |
| <b>Trigger:</b>  |  |   |
| <ul style="list-style-type: none"> <li>• The Tri-Party Repo has been successfully reported, and the message has been shared with both the initiator and counterparty.</li> </ul> |  |   |
| <b>Activity Steps</b>  |  |   |
| #  | Test Step  | Expected Result   |
| 1  | Submit Message Type 197 to reject an Unmatched Tri-Party Repo trade. | <ul style="list-style-type: none"> <li>- Tri-Party Repo trade rejection submitted successfully.</li> <li>- Record deleted end of day.</li> <li>- Receive a success ack (message type 123, file identifier 140)</li> </ul> |



|   |   |  |
|---|---|--|
|   |   | If the message has failed, receive announcement message type number 125. |
| 2 | Record the details of all the response message types. |  |

### 6.18 Edit a matched Tri-Party Repo – 198

| Test Case ID   | API Gateway                   | Mandatory       |
|--|-------------------------------|-----------------|
| T1-0018  | Edit a matched Tri-party Repo | Y               |
| <b>Description:</b> <ul style="list-style-type: none"> <li>- A member submits a message to edit a matched Tri-Party Repo Trade.</li> <li>- The following requests can be made as part of the edit: <ul style="list-style-type: none"> <li>o Terminate a Tri-Party Repo</li> <li>o Mature Tri-Party Repo trades earlier than originally scheduled.</li> <li>o Update the repo rate previously captured on the Tri-Party Repo</li> <li>o Amend the Principal/Consideration amount previously recorded on the Tri-Party Repo</li> </ul> </li> </ul> |                               |                 |
| <b>Trigger:</b> <ul style="list-style-type: none"> <li>• The Tri-Party Repo has been matched successfully but remains uncommitted.</li> </ul>  |                               |                 |
| <b>Activity Steps</b>  |                               |                 |
| #  | Test Step                     | Expected Result |



|          |   |  |
|----------|---|--|
| <b>1</b> | Submit Message Type 198 to amend of a matched Tri-party Repo trade as per the allowed action. | <ul style="list-style-type: none"> <li>- Tri-Party Repo trade edit message submitted successfully.</li> <li>- Receive a success ack (message type 123, file identifier 140)</li> </ul> <p>If the message has failed, receive announcement message type number 125.</p> |
| <b>2</b> | Record the details of all the response message types.   |  |

## 7. Standard Conformance Messages

Below is a table with all messages that are currently in the API.

| Message Type No       | File Identifier | Message         |
|-----------------------|-----------------|-----------------|
| <b>Login</b>          |                 |                 |
| 0                     |                 | Login           |
| 84                    |                 | HeartBeat       |
| 88                    |                 | Change password |
| 4                     |                 | Logout          |
| <b>Data Downloads</b> |                 |                 |

|    |    |                     |
|----|----|---------------------|
| 36 | 10 | Unmatched           |
| 36 | 2  | Instruments         |
| 36 | 3  | Contract Dates      |
| 36 | 4  | Strike Data         |
| 36 | 16 | MTM                 |
| 36 | 1  | Market display data |
| 36 | 5  | Active orders       |
| 36 | 7  | Completed Orders    |
| 36 | 8  | Deals               |
| 36 | 9  | Positions           |
| 36 | 14 | Dealer data         |
| 36 | 12 | Client data         |
| 36 | 15 | Member data         |
| 36 | 19 | Skew data           |
| 36 | 24 | Risk limits         |
| 36 | 25 | Daily rates         |



|    |    |                                      |
|----|----|--------------------------------------|
| 36 | 38 | Message type data                    |
| 36 | 61 | Tripartite setup                     |
| 36 | 63 | Custom Future                        |
| 36 | 64 | Trace deal                           |
| 36 | 65 | Clearing member data                 |
| 36 | 67 | Message Subscription                 |
| 36 | 78 | Group Definition                     |
| 36 | 79 | Fee Data                             |
| 36 | 81 | Fee Calculation                      |
| 36 | 83 | Transfer client member data          |
| 36 | 82 | Transfer client data                 |
| 36 | 84 | Transfer member data                 |
| 36 | 85 | Transfer member Clearing member data |
| 36 | 70 | Daily Account Summary                |
| 36 | 66 | Client Detail                        |
| 36 | 89 | Exchange Announcements               |



|                     |     |   |
|---------------------|-----|---|
| 36                  | 94  | Options Traded                                      |
| 36                  | 100 | Early Valuations                                    |
| 36                  | 89  | Exchange Announcements                              |
| 36                  | 101 | Divided Payments                                    |
| 36                  | 102 | Client Member Margin Multiplier Data                |
| 36                  | 103 | First trade of the day                              |
| 36                  | 107 | Options concentration risk                          |
| <b>Subscription</b> |     |   |
| 99                  |     | Future Subscription                                 |
| 67                  |     | Option Subscription                                 |
| 42                  |     | Unsubscribe   |
| 7                   |     | Change Dealer Message Subscription                  |
| 142                 |     | Subscribe to futures closeout publishing iterations |
| 3                   |     | Re-request depth                                    |
| <b>Order Entry</b>  |     |   |
| 56                  |     | Insert a bid/offer order for a single stock future  |
| 56                  |     | Insert a bid/offer order for an index future        |



|                         |  |  |
|-------------------------|--|--|
| 56                      |  | Insert a bid/offer order for a dividend neutral future |
| 56                      |  | Insert a bid/offer order for a dividend future         |
| 56                      |  | Insert a bid/offer order for a call option             |
| 56                      |  | Insert a bid/offer order for put option                |
| 56                      |  | Insert a bid/offer order for a spread                  |
| 56                      |  | Insert a bid/offer order for a split                   |
| <b>Order Management</b> |  |  |
| 8                       |  | Suspend Order (flag set to S)                          |
| 8                       |  | Delete Order (flag set to D)                           |
| 15                      |  | Delete suspended Order                                 |
| 27                      |  | Resubmit Order   |
| 85                      |  | Cancel Active Order                                    |
| 104                     |  | Reduce Active Order                                    |
| 118                     |  | Edit suspended order                                   |
| 160                     |  | Edit active order by order sequence number             |
| 161                     |  | Edit active order by user reference number             |



|                             |  |   |
|-----------------------------|--|---|
| 162                         |  | Cancel order by user reference number   |
| <b>Report Only Messages</b> |  |   |
| 29                          |  | ROT with matching details and automatic matching (flag set to 'must confirm rot's') |
| 29                          |  | ROT with matching details and manual accept (flag set to 'must confirm rot's')      |
| 26                          |  | Edit Report only deal   |
| 30                          |  | Unmatched deal deletes  |
| 40                          |  | Unmatched deal accept   |
| <b>Entity Management</b>    |  |   |
| 102                         |  | Create Client   |
| 56                          |  | Load order on newly created client  |
| <b>Deal Management</b>      |  |   |
| 31                          |  | Option Exercise   |
| 33                          |  | Option Abandon  |
| 22                          |  | Split deal  |
| 24                          |  | Cumulate Deal   |



|     |  |                           |
|-----|--|---------------------------|
| 64  |  | Assign Deal – To a client |
| 64  |  | Assign Deal – To a member |
| 62  |  | Tri-part Deal Entry       |
| 115 |  | Roll Position Forward     |

