

CASH BONDS & INTEREST RATE DERIVATIVE MARKETS

Conformance Document:

V1.04

April 2026

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
1.03	March 2025	Updated Key Repos API Processes – 5.1, 5.2 & 5.3 Updated Unconfirmed Order – 6.2
1.04	April 2026	Updated Bond Repos functionality: Added API changes summary - 5 Updated Key Repos API Processes – 5.1 & 5.2 Updated Accept an Unmatched Classic Repo Trade – 6.2 Edit Classic Repo Trade – 6.4 Updated document for the inclusion of Bond CCP functionality applicable to the Interest Rate & Interest Rate Derivative participants.

1.4 References

Name	Description
JSE Interest Rates and Currency Derivatives API Specification Version: 3.1Rev1_MidTerm	Indicates the changes necessary to accommodate the functionality for the Nutron Bonds Repo and Bond CCP initiatives

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 provides clients with comprehensive and essential information regarding the Bond CCP and NUTRON Repo Reform conformance testing for the Interest Rate Derivatives and Cash Bond markets.

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.

The Bond CCP project introduces central clearing for South African government bonds. Under this model, all ETP trades will be cleared through the central counterparty. In the Cash Bonds Reported market, trades may be elected for clearing provided they occur between Primary Dealers and meet the prescribed eligibility requirements.

Bond CCP delivers a more robust and risk mitigated framework, **offering safer, transparent structures that protect investors and reduce systemic exposure** and brings South Africa's bond market into alignment with leading global clearing standards.

Bond CCP changes are mandatory for all clients using the Nutron API. Clients must ensure that all relevant downstream systems are assessed and updated where necessary. To maintain uninterrupted operations at Bond CCP go live all participants operating in the Interest Rate Derivatives and Cash bond markets are required to implement the changes.

The NUTRON Repo Reform changes are mandatory only to clients who choose to make use of the functionality. These enhancements were introduced as part of the JSE's broader initiative to align South Africa's financial markets with global standards.

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 Interest Rate Derivatives and Cash Bond markets.

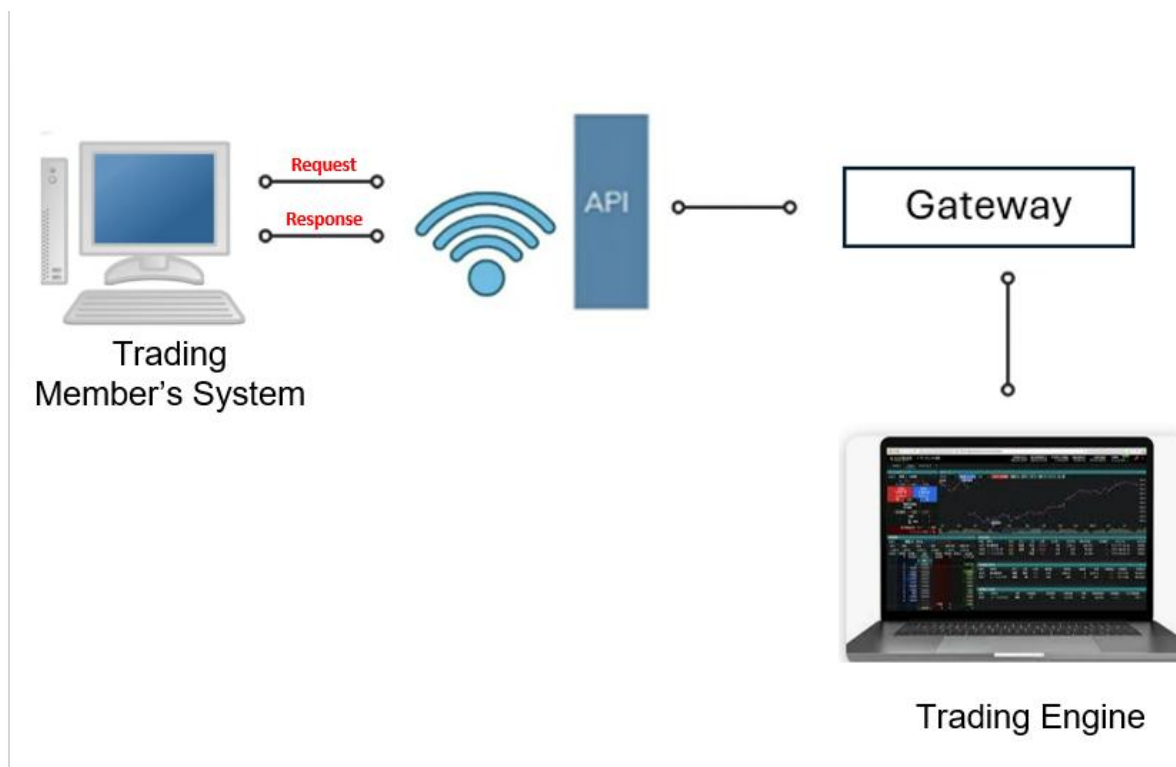
3.1 Conformance Test Environment

Conformance testing will take place within the existing Customer Testing Service (CTS) 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 Interest Rate Derivatives and Cash 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 (TSPs), also referred to as Members, are required to evaluate the reporting and download functionalities associated with the newly introduced Classic and Tri-Party Repos, as well as Bond CCP.



Clients have the opportunity to perform conformance testing for Repos API changes, although it will not be mandated.

Bond CCP API changes are mandatory and require clients to perform conformance testing.

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 (CTA) 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 at a time. If required and available, another slot can be booked after the initial slot has been complete.
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.

3.5 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.

For the **Nutron Repo Reform scenario's** each step within a given scenario applies to Trading Service Participants (TSPs), also known as Members utilising the functionality.

Note that some original Repo functionality has not been activated. For consistency with previous versions of this conformance document, these scenarios are still included in the document. However, these scenarios will be marked to indicate that they are inactive in the current release. Conformance will not be needed for these inactive scenarios.

For the **Bond CCP scenarios**, the applicable party for each step—whether Trading Service Participants (TSPs), Clearing Members, or both—is clearly indicated within the scenario. Each participant must complete the steps relevant to their role.

A Customer Service Agent will provide a conformance checklist that must be completed as part of the testing process. If the actual result of a step differs from the expected outcome, clients must document the attained result on the checklist 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. NUTRON REPO REFORM CONFORMANCE MESSAGE FLOWS & TEST CASES

5.1 KEY BOND REPOS API PROCESSES AND MESSAGES

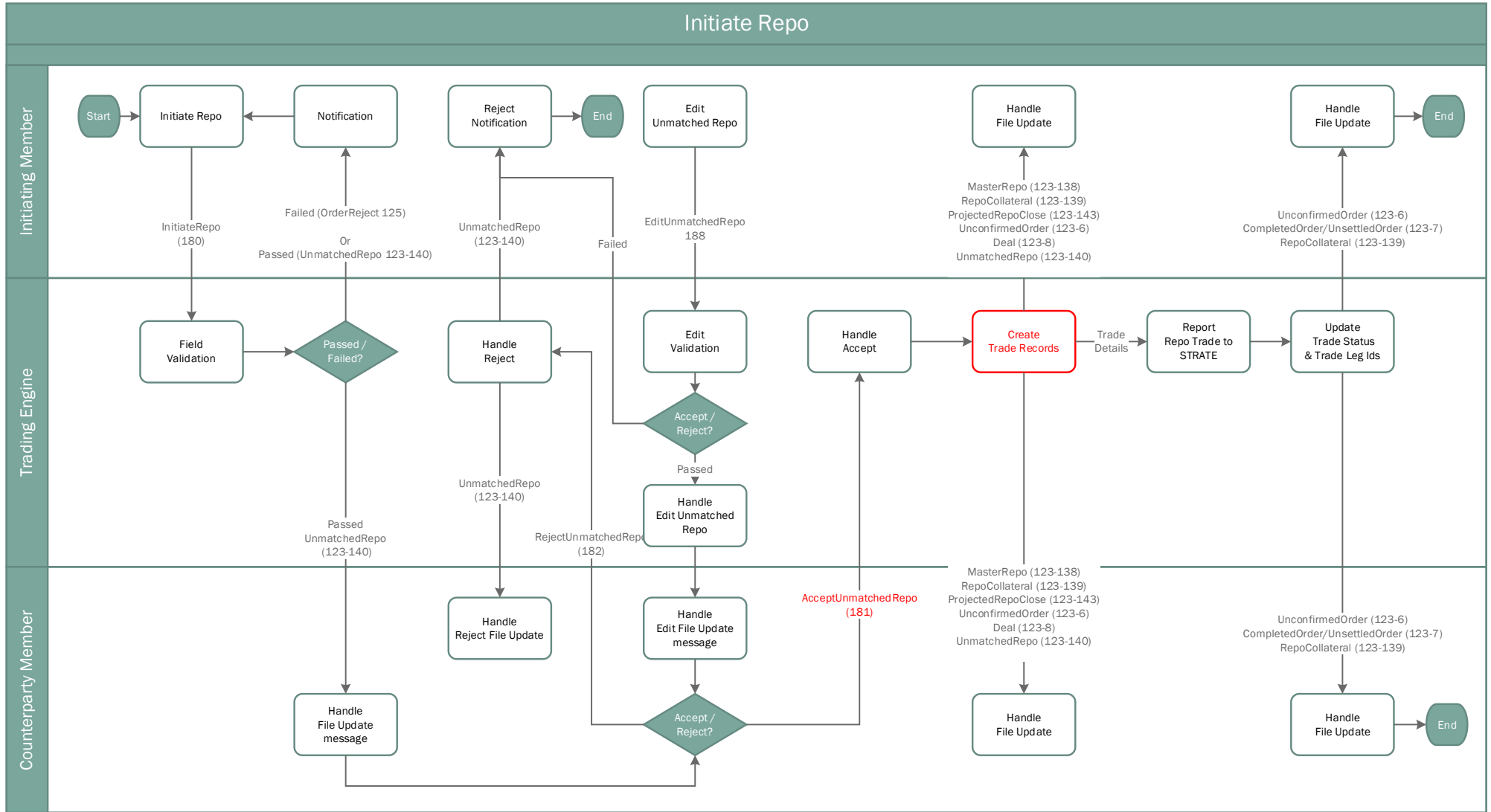
Below is a summary of the API changes that have been introduced in Version 1.04:

API Spec Section:	Description:	New or Change to Existing Message:	Impact:
7.11.2 Accept Unmatched Repo – Message Type 181	Sub Account, BDA Account Number and User Reference by Counterparty	Change to Existing Message	Only applicable to Members using Bond Repo functionality
7.11.4 Edit Repo – Message Type 183	User Reference field for use by Initiator to the trade (only Initiator can Edit a Repo)	Change to Existing Message	Only applicable to Members using Bond Repo functionality
9.68 Triparty Deal – Message Type 145	Status of 'r - Strate Rejected' Status of 'e – Error: An error occurred committing the trade' Status of 'x – Cancelled: The trade was cancelled'	Change to Existing Message	Only applicable to Members using Bond Repo functionality
6.10 - Origin	Added: Classic Repo Leg One and Classic Repo Leg Two to distinguish between Classics and Buy Sell Backs	Introducing New Values	Only applicable to Members using Bond Repo functionality



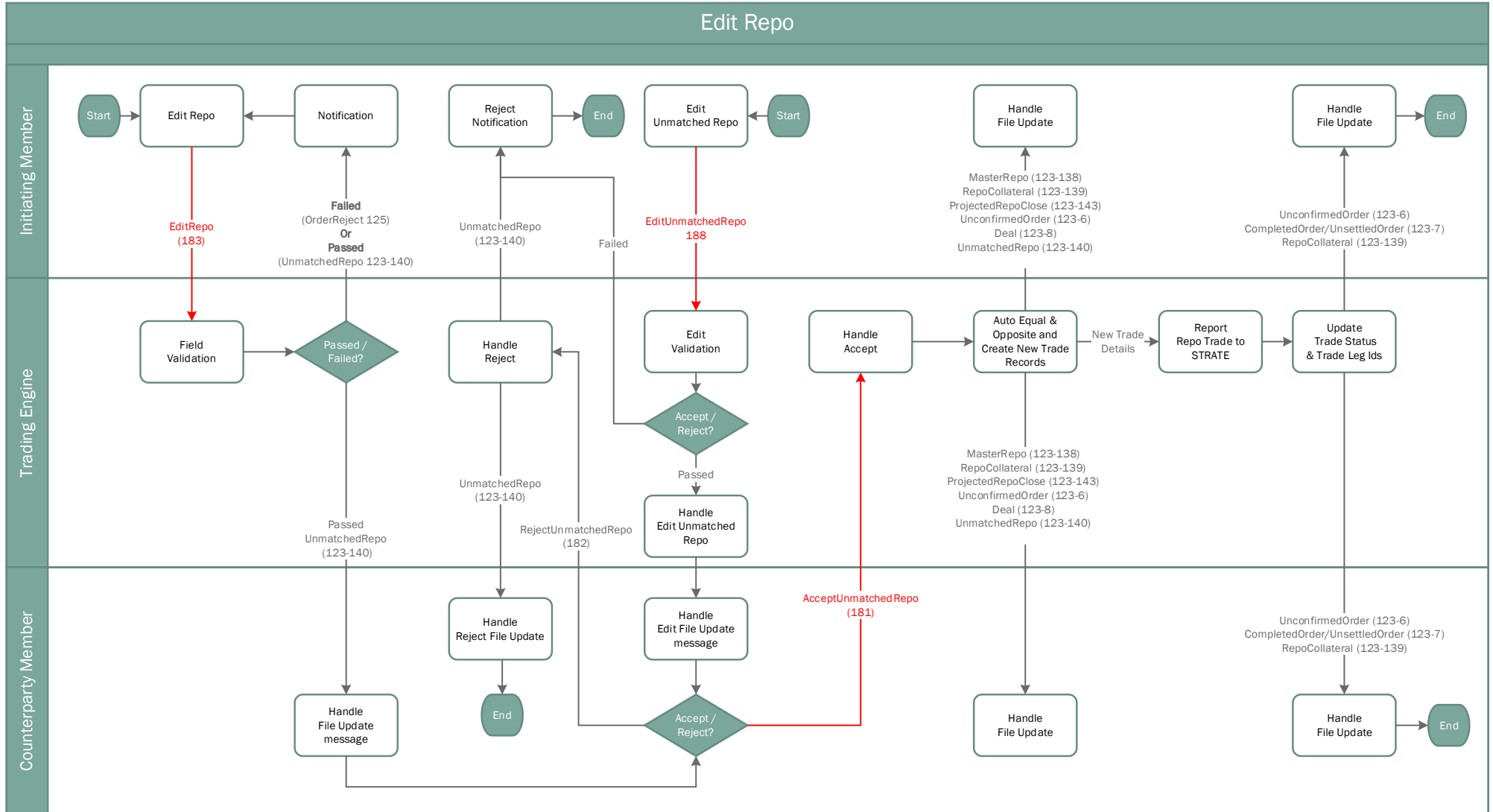
5.1.1 Reporting a Repo

Note: Items marked in **red** indicate areas where there were updates made to the API

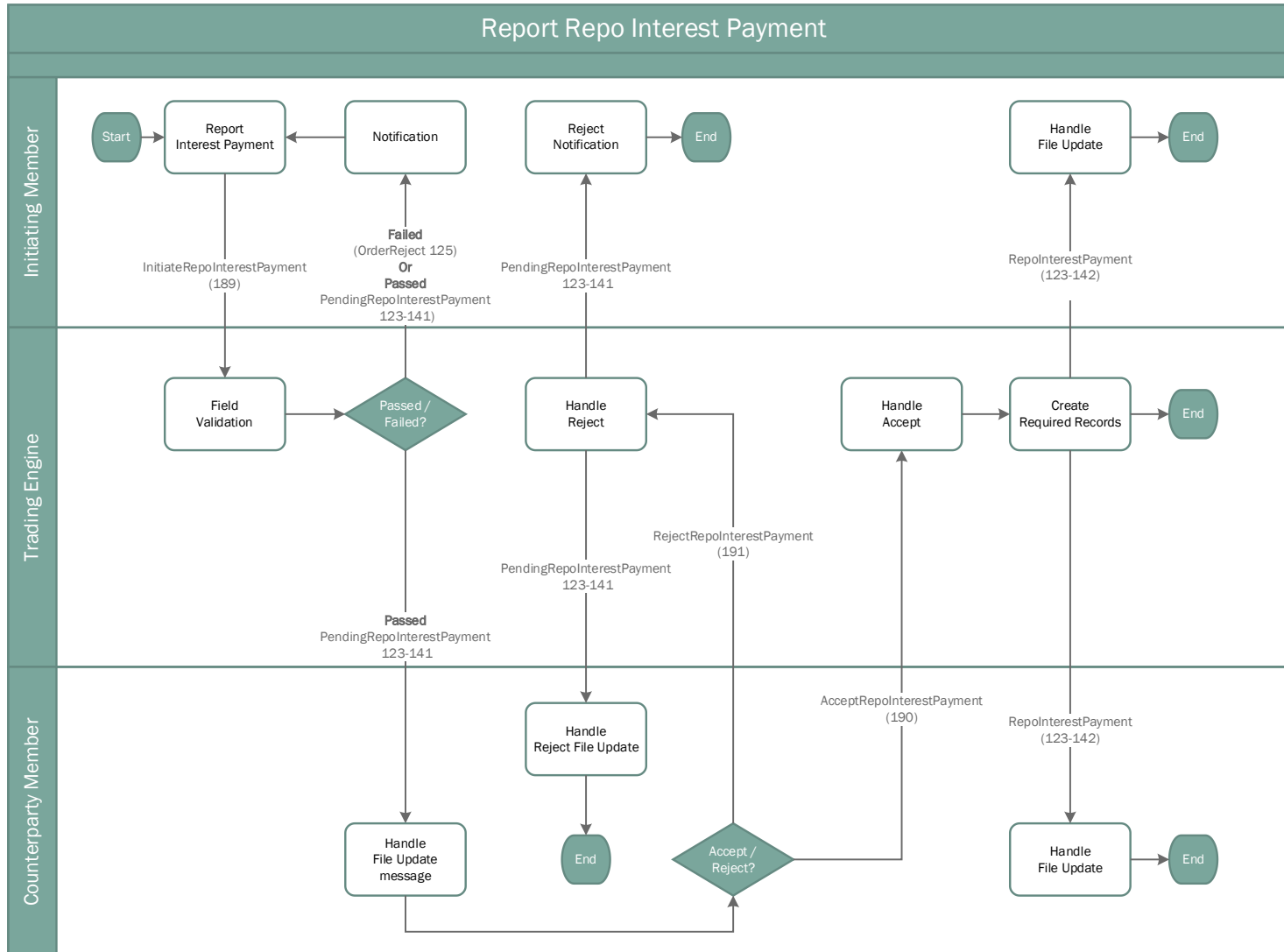


5.1.2 Editing a Repo

Note: Items marked in red indicate areas where there were updates made to the API



5.1.3 Reporting a Repo Interest Payment (availability to be confirmed – no conformance required)



5.1.4 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
Classic Repo		
180		InitiateRepo
181		AcceptUnmatchedRepo
182		RejectUnmatchedRepo
183		EditRepo
184 (inactive – no conformance required)		SubstituteRepo
185		CloseRepo
186		CancelRepo
187		CancelUnmatchedRepo
188		EditUnmatchedRepo
Repo Interest Payment (availability to be confirmed – no conformance required)		
189		InitiateRepoInterestPayment

190		AcceptRepoInterestPayment
191		RejectRepoInterestPayment
192		CancelPendingRepoInterestPayment
Tri-Party		
193		InitiateTripartyRepo
194		EditUnmatchedTripartyRepo
195		CancelUnmatchedTripartyRepo
196		AcceptUnmatchedTripartyRepo
197		RejectUnmatchedTripartyRepo
198		EditTripartyRepoStructure
Response File Downloads		
123	138	MasterRepo
123	139	RepoCollateral
123	140	UnmatchedRepo
123 (availability to be confirmed – no conformance required)	141	PendingRepoInterestPayment



123 (availability to be confirmed – no conformance required)	142	RepoInterestPayment
123	143	ProjectedRepoClose
123	144	UnmatchedTripartyRepo
123	145	TripartyDeal
36	146	CollateralBasket

Table 1. New Message Structures

5.2 Classic Repos and Triparty Trading Conformance

The initiation of a repurchase agreement (Repo) is triggered when one member request to sell their securities to another member and they agree on terms to repurchase those securities later at a higher price. Only fixed rate Repo's will be included as part of the scope.

The following table depicts the Classic types:

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

5.2.1 Report Classic Repo Trade - 180

Test Case ID	API Gateway	Mandatory
T1-001	Report a Classic Repo	Mandatory; applies only to clients who choose to make use of the functionality
Description:		
Member submits a message to report a Classic Repo Trade.		
Trigger:		
<ul style="list-style-type: none"> The Member must be logged in and have permission and rights to submit an API message to the JSE Trading engine. 		
Activity Steps		
#	Test Step	Expected Result
1	Submit Message Type 180 to report a Classic Repo trade	<ul style="list-style-type: none"> Classic Repo trade submitted successfully. Receive a success ack (message type 123, file identifier 140) <p>If the message has failed, receive announcement message type number 125</p>
2	Record the details of message type 123 - 140	

5.2.2 Accept an Unmatched Classic Repo Trade - 181

Test Case ID	API Gateway	Mandatory
T1-002	Accept an Unmatched Classic Repo	Mandatory; applies only to clients who choose to make use of the functionality
Description:		
Member submits a message to accept a Classic Repo Trade.		
Trigger:		
<ul style="list-style-type: none"> The initiating member has reported the Repo trade. The unmatched Repo trade record published to the initiating and counterparty members. 		
Activity Steps		
#	Test Step	Expected Result
1	Submit Message Type181 to accept an Unmatched Classic Repo trade, including the fields: Sub Account, BDA Account Number and User Reference	<ul style="list-style-type: none"> - Classic Repo trade accepted successfully. - Both parties will receive the following message types and identifiers: <ul style="list-style-type: none"> o MasterRepo (123 – 138) o RepoCollateral (123 -139) o ProjectedRepoClose (123– 143) o UnconfirmedOrder (123 –6) o Deal (123 – 8)



		<ul style="list-style-type: none"> ○ Unmatched Repo (123 – 140) <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.	

5.2.3 Reject an Unmatched Classic Repo Trade - 182

Test Case ID	API Gateway	Mandatory
T1-003	Reject an Unmatched Classic Repo	Mandatory; applies only to clients who choose to make use of the functionality
<p>Description:</p> <p>Member submits a message to reject an unmatched Classic Repo Trade.</p>		

Trigger:		
<ul style="list-style-type: none"> The initiating member has reported the Repo trade, and the message shared with both initiator and counterparty. 		
Activity Steps		
#	Test Step	Expected Result
1	Submit Message Type 182 to reject an Unmatched Classic Repo trade.	<ul style="list-style-type: none"> Classic Repo trade rejection submitted successfully. Receive a success ack (message type 123, file identifier 140) <p>If the message has failed, receive announcement message type number 125.</p>
2	Record the details of all the response message types.	

5.2.4 Edit Classic Repo Trade - 183

Test Case ID	API Gateway	Mandatory
T1-004	Edit a matched Classic Repo	Mandatory; applies only to clients who choose to make use of the functionality
Description:		
Member submits a message to edit a matched Classic Repo Trade.		

Trigger:

- The Repo matched successfully, and trade legs updated with status = Unsettled

Activity Steps

#	Test Step	Expected Result
1	<p>Submit Message Type 183 to amend the values of a matched Classic Repo trade.</p> <p>The Edit Repo message manages the following edits:</p> <p>(a) Re-rate</p> <p>(b) Extension of the termination date</p> <p>(c) User Reference field</p> <p>Items (d) and (e) below are yet to be confirmed – no conformance required</p> <p>(d) Reporting of Interest rate payment + Rerate</p> <p>(e) Reporting of Interest rate payment + Extension</p>	<ul style="list-style-type: none">- Classic Repo trade edit message submitted successfully.- Receive a success ack (message type 123, file identifier 140) <p>If the message has failed, receive announcement message type number 125.</p>
2	Record the details of all the response message types.	



5.2.5 Substitute A Collateral - 184 [\(inactive – no conformance required\)](#)

Test Case ID	API Gateway	Mandatory
T1-005	Substitute a Collateral	Mandatory; applies only to clients who choose to make use of the functionality
<p>Description:</p> <p>A member submits a message to replace an existing collateral with a different instrument of an equal or higher value. A Member can substitute a Repo with a single instrument multiple times, but the system will allow the member to only substitute a Repo with multiple instruments (maximum of 3) once. A single collateral can be substituted with multiple instruments of equal or higher combined value.</p>		
<p>Trigger:</p> <ul style="list-style-type: none"> The Repo has matched, and trade legs updated with status = Unsettled 		
Activity Steps		
#	Test Step	Expected Result
1	Submit Message Type 184 to substitute a single / multiple instruments.	<ul style="list-style-type: none"> New single / multiple collateral(s) substituted successfully. Receive a success ack (message type 123, file identifier 140) <p>If the message has failed, receive announcement message type number 125.</p>
2	Record the details of all the response message types.	

5.2.6 Close a Repo – 185

Test Case ID	API Gateway	Mandatory
T1-006	Close a Repo	Mandatory; applies only to clients who choose to make use of the functionality
Description:		
Member submits a message to terminate an Open-ended / Evergreen Classic Repo on a specified date.		
Trigger:		
<ul style="list-style-type: none"> The Repo has matched, and trade legs updated with status = Unsettled There is no closing date for the Repo. The notice period saved if the Repo is Evergreen. 		
Activity Steps		
#	Test Step	Expected Result
1	Submit Message Type 185 to close an Open-ended / Evergreen Classic Repo.	<ul style="list-style-type: none"> The closing date of the Open-ended / Evergreen Classic Repo is saved successfully. Receive a success ack (message type 123, file identifier 140) <p>If the message has failed, receive announcement message type number 125.</p>
2	Record the details of all the response message types.	

5.2.7 Cancel a Repo – 186

Test Case ID	API Gateway	Mandatory
T1-007	Cancel a Repo	Mandatory; applies only to clients who choose to make use of the functionality
<p>Description:</p> <p>The initiating member submits a message to cancel a Classic Repo that has not settled yet. If the initiation leg (R1) is settled the cancellation will be rejected. The cancellation reason will be displayed to both parties if provided at cancellation.</p>		
<p>Trigger:</p> <ul style="list-style-type: none"> The initiating member has reported the Repo trade and message shared with both parties. R1 has not settled. 		
Activity Steps		
#	Test Step	Expected Result
1	Submit Message Type 186 to cancel a Classic Repo.	<ul style="list-style-type: none"> The cancellation of a Classic Repo saved successfully. The record deleted end of day. Receive a success ack (message type 123, file identifier 140) <p>If the message has failed, receive announcement message type number 125.</p>
2	Record the details of all the response message types.	

5.2.8. Cancel an Unmatched Repo – 187

Test Case ID	API Gateway	Mandatory
T1-008	Cancellation of an unmatched Repo	Mandatory; applies only to clients who choose to make use of the functionality
Description:		
Initiating member submits a message to cancel changes that are pending approval from the counterparty of an unmatched Classic Repo. The cancellation reason will be displayed to both parties if provided at cancellation.		
Trigger:		
<ul style="list-style-type: none"> The initiating member has reported the Repo trade and message shared with both parties. Initiation leg (R1) has not settled 		
Activity Steps		
#	Test Step	Expected Result
1	Submit Message Type 187 to cancel an unmatched Classic Repo.	<ul style="list-style-type: none"> The cancellation of an unmatched Classic Repo saved successfully. The record deleted end of day. Receive a success ack (message type 123, file identifier 140) <p>If the message has failed, receive announcement message type number 125.</p>
2	Record the details of all the response message types.	

5.2.9 Edit an Unmatched Repo – 188

Test Case ID	API Gateway	Mandatory
T1-009	Edit an Unmatched Repo	Mandatory; applies only to clients who choose to make use of the functionality
<p>Description:</p> <p>A member submits a message to edit an unmatched Classic Repo where the initiation leg (R1) has not settled yet. The Initiator will be enabled to edit all fields except the counterparty fields. The Counterparty can only edit the BDA account and accept the changes. After editing an unmatched Classic Repo, the status will become pending – indicating that the request is pending approval from the Counterparty.</p>		
<p>Trigger:</p> <ul style="list-style-type: none"> The initiating member has reported the Repo trade and message shared with both parties. R1 has not settled 		
Activity Steps		
#	Test Step	Expected Result
1	Submit Message Type 188 to edit an unmatched Classic Repo.	<ul style="list-style-type: none"> The amendment of an unmatched Classic Repo saved successfully. Receive a success ack (message type 123, file identifier 140) <p>If the message has failed, receive announcement message type number 125.</p>
2	Record the details of all the response message types.	

5.2.10 Report a Repo interest payment – 189 [\(availability to be confirmed – no conformance required\)](#)

Test Case ID	API Gateway	Mandatory
T1-0010	Report a Repo interest payment	Mandatory; applies only to clients who choose to make use of the functionality
<p>Description:</p> <p>An initiating member submits a message to report a Repo interest rate payment that has been agreed by the two parties. The pending payment record is shared with the counterparty to be accepted / rejected. After editing an unmatched Classic Repo, the status will become pending – indicating that the request is pending approval from the Counterparty.</p>		
<p>Trigger:</p> <ul style="list-style-type: none"> The Repo has matched, and trade legs updated with status = Unsettled 		
Activity Steps		
#	Test Step	Expected Result
1	Submit Message Type 189 to report a Repo interest payment	<ul style="list-style-type: none"> The interest payment value and payment date submitted successfully. Receive a success ack (message type 123, file identifier 140) <p>If the message has failed, receive announcement message type number 125.</p>
2	Record the details of all the response message types.	

5.2.11 Accept a Repo interest payment – 190 ([availability to be confirmed – no conformance required](#))

Test Case ID	API Gateway	Mandatory
T1-0011	Accept a Repo interest payment	Mandatory; applies only to clients who choose to make use of the functionality
<p>Description:</p> <p>A counterparty submits a message to accept the reported interest rate payment that has been agreed between the two parties. The total value of each interest payment made throughout the lifetime of the Classic Repo will be deducted from the interest amount calculated at the close of the Repo.</p>		
<p>Trigger:</p> <ul style="list-style-type: none"> The Repo interest payment reported successfully. The status of the Repo interest rate payment is pending awaiting the acceptance from the Counterparty. 		
Activity Steps		
#	Test Step	Expected Result
1	Submit Message Type 190 to accept a Repo interest payment	<ul style="list-style-type: none"> The interest payment value and payment date saved successfully. Receive a success ack (message type 123, file identifier 140) <p>If the message has failed, receive announcement message type number 125.</p>
2	Record the details of all the response message types.	

5.2.12 Reject a Repo interest payment – 191 [\(availability to be confirmed – no conformance required\)](#)

Test Case ID	API Gateway	Mandatory
T1-0012	Reject a Repo interest payment	Mandatory; applies only to clients who choose to make use of the functionality
Description:		
A counterparty member submits a message to reject the reported interest rate payment.		
Trigger:		
<ul style="list-style-type: none"> The Repo interest payment has reported successfully. The status of the Repo interest rate payment is pending awaiting the acceptance from the counterparty. 		
Activity Steps		
#	Test Step	Expected Result
1	Submit Message Type 191 to reject a Repo interest payment	<ul style="list-style-type: none"> The interest payment record rejection submitted successfully. The record deleted at end of day. Receive a success ack (message type 123, file identifier 140). <p>If the message has failed, receive announcement message type number 125.</p>
2	Record the details of all the response message types.	

5.2.13 Cancel a pending Repo interest payment – 192 [\(availability to be confirmed – no conformance required\)](#)

Test Case ID	API Gateway	Mandatory
T1-0012	Cancel a pending Repo interest payment	Mandatory; applies only to clients who choose to make use of the functionality
Description:		
The initiating member submits a message to cancel the reported interest rate payment.		
Trigger:		
<ul style="list-style-type: none"> The Repo interest payment reported successfully. The status of the Repo interest rate payment is pending awaiting the acceptance from the Counterparty. 		
Activity Steps		
#	Test Step	Expected Result
1	Submit Message Type 192 to reject a Repo interest payment	<ul style="list-style-type: none"> The interest payment record rejection submitted successfully. The record deleted at end of day. Receive a success ack (message type 123, file identifier 140). <p>If the message has failed, receive announcement message type number 125.</p>
2	Record the details of all the response message types.	

5.2.14 Report a Tri-Party Repo – 193

Test Case ID	API Gateway	Mandatory
T1-0014	Reporting a Triparty Repo	Mandatory; applies only to clients who choose to make use of the functionality
<p>Description:</p> <p>The initiating member submits a message to report a Triparty trade at the JSE. The reported Tri-party will be submitted to Strate for collateral management. A Tri-party can be fixed rate, closed-ended or open-ended.</p>		
<p>Trigger:</p> <ul style="list-style-type: none"> Members have an existing basket in the system. The Collateral Basket that the Tri-party will trade on has downloaded as part of reference data at start of trading. 		
Activity Steps		
#	Test Step	Expected Result
1	Submit Message Type 193 to report a Tri-Party Repo	<ul style="list-style-type: none"> - Classic Repo trade submitted successfully. - Receive a success ack (message type 123, file identifier 140). <p>If the message has failed, receive announcement message type number 125.</p>
2	Record the details of all the response message types.	

5.2.15 Edit an Unmatched Tri-Party Repo – 194

Test Case ID	API Gateway	Mandatory
T1-0015	Editing an unmatched Triparty Repo	Mandatory; applies only to clients who choose to make use of the functionality
Description:		
<p>A member submits a message to edit an unmatched Tri-Party Repo where the initiation leg (R1) has not settled yet. After editing an unmatched Tri-Party Repo, the status will become pending – indicating that the request is pending approval from the Counterparty.</p>		
Trigger:		
<ul style="list-style-type: none"> The initiating member has reported the Tri-party Repo trade and message shared with both parties. R1 has not settled 		
Activity Steps		
#	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"> New values of an unmatched Tri-party Repo trade submitted successfully. Receive a success ack (message type 123, file identifier 140). <p>If the message has failed, receive announcement message type number 125.</p>
2	Record the details of all the response message types.	

5.2.16 Cancel an Unmatched Tri-Party Repo – 195

Test Case ID	API Gateway	Mandatory
T1-0016	Cancellation of an unmatched Triparty Repo	Mandatory; applies only to clients who choose to make use of the functionality
Description:		
A message sent by the Initiating member to cancel changes that are pending approval from the counterparty of an unmatched Tri-Party Repo. The cancellation reason will be displayed to both parties if provided at cancellation.		
Trigger:		
<ul style="list-style-type: none"> The Unmatched Tri-party Repo trade successfully submitted, and record sent to the initiating and counterparty members. 		
Activity Steps		
#	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"> The cancellation of an unmatched Tri-Party Repo saved successfully. The record deleted end of day. Receive a success ack (message type 123, file identifier 140) <p>If the message has failed, receive announcement message type number 125.</p>
2	Record the details of all the response message types.	

5.2.17 Accept an Unmatched Tri-Party Repo – 196

Test Case ID	API Gateway	Mandatory
T1-0016	Accepting an unmatched Triparty Repo	Mandatory; applies only to clients who choose to make use of the functionality
Description:		
A message sent by the counterparty member to accept an unmatched Tri-Party Repo.		
Trigger:		
<ul style="list-style-type: none"> The Unmatched Tri-party Repo trade successfully submitted, and record sent to the initiating and counterparty members. 		
Activity Steps		
#	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"> The acceptance of the reported Tri-Party Repo by the Counterparty submitted successfully. The status = “Pending Strate” and updated to “Strate Accepted” once acknowledgement received from Strate Receive a success ack (message type 123, file identifier 140) <p>If the message has failed, receive announcement message type number 125.</p> <ul style="list-style-type: none"> Status = “Strate Rejected” if Strate rejects the reported Tri-Party Trade.
2	Record the details of all the response message types.	

5.2.17 Reject an Unmatched Tri-Party Repo – 197

Test Case ID	API Gateway	Mandatory
T1-0017	Reject an Unmatched Tri-party Repo	Mandatory; applies only to clients who choose to make use of the functionality
Description:		
Member submits a message to reject an unmatched Tri-party Repo Trade.		
Trigger:		
<ul style="list-style-type: none"> The Tri-Party Repo reported successfully, and the message shared with both initiator and counterparty. 		
Activity Steps		
#	Test Step	Expected Result
1	Submit Message Type 197 to reject an Unmatched Tri-Party Repo trade.	<ul style="list-style-type: none"> Tri-Party Repo trade rejection submitted successfully. Record deleted end of day. Receive a success ack (message type 123, file identifier 140) <p>If the message has failed, receive announcement message type number 125.</p>
2	Record the details of all the response message types.	



5.2.18 Edit a matched Tri-Party Repo – 198

Test Case ID	API Gateway	Mandatory
T1-0018	Edit a matched Tri-party Repo	Mandatory; applies only to clients who choose to make use of the functionality
Description: <ul style="list-style-type: none"> - Member submits a message to edit a matched Tri-party Repo Trade. - The member will be able to request the following requests: <ul style="list-style-type: none"> - Terminate a Tri-party Repo - Mature tri-party repo trades earlier than originally intended - Edit the repo rate previously captured on Tri-Party repo - Amend the Principal/Consideration amount previously captured on tri-party 		
Trigger: <ul style="list-style-type: none"> • The Tri-party Repo has matched but not committed. 		
Activity Steps		
#	Test Step	Expected Result
1	Submit Message Type 198 to amend of a matched Tri-party Repo trade as per the allowed action.	<ul style="list-style-type: none"> - Tri-Party Repo trade edit message submitted successfully. - Receive a success ack (message type 123, file identifier 140) <p>If the message has failed, receive announcement message type number 125.</p>
2	Record the details of all the response message types.	



6. Bond CCP Changes and Test Cases

6.1 Summary of the Key Enhancements Introduced to the Nutron API

The following section outlines the key updates across several Nutron API message types that support CCP integration. Please note that, as indicated in the 'Market Impact' column in the below table, these changes apply to the Interest Rate Derivatives (IRD) and/or Cash Bond markets.

API Message	Description	New or Change to Existing Message	Market Impact
Instruments Data – Number 2	<ul style="list-style-type: none"> • Addition: Eligible For CCP Clearing Flag – Indicates if the instrument is eligible for CCP Clearing. • Addition: ID Netting Group - Indicates the netting group used for VaR margin. 	Change to existing message	IRD & Cash Bonds
Member Data - Number 15	<ul style="list-style-type: none"> • Addition: Bonds Cleared flag - Indicates that a member is eligible for clearing. 	Change to existing message	IRD & Cash Bonds
Clearing Member Data – Number 65	<ul style="list-style-type: none"> • Addition: Bonds Cleared flag - Indicates if the clearing member is eligible to clear trades. 	Change to existing message	IRD & Cash Bonds
Unmatched Deal Data – Number 10	<ul style="list-style-type: none"> • Addition: Cleared Flag - Indicates if the trade is cleared. 	Change to existing message	IRD & Cash Bonds

Deals Data – Number 8	<ul style="list-style-type: none"> • Addition: Trade Execution Venue - The execution venue of the trade (JSE / ETP) • Addition: External Exchange Trade ID - External exchange Trade ID as related to externally booked trades. • Addition: External Deal ID - External deal ID related to the deal done on an external exchange. • Addition: Cleared Flag - Indicates if this trade is cleared or not. • Addition: Clean Price - The clean price as recorded at the time of the trade • Addition: Accrued Interest - The accrued interest as recorded at the time of the trade • Amendment: Counterparty - This field may be left blank for the market where trade anonymity applies 	Change to existing message	IRD & Cash Bonds
Completed Orders / Unsettled Orders Data – Number 7 and Unconfirmed Orders Data – Number 6	<ul style="list-style-type: none"> • Addition: Trade Execution Venue - The execution venue of the trade (JSE / ETP) • Addition: External Exchange Trade ID - External exchange Trade ID as related to externally booked trades. • Addition: Settled - Indicated if the order has been settled. • Addition: External Deal ID- External deal ID related to the deal done on an external exchange. • Addition: Cleared Flag - Indicates if this trade is cleared or not. • Amendment: Counterparty - This field will be blank for the market where trade anonymity applies 	Change to existing message	IRD & Cash Bonds



Insert Report Only Deal – Message Type 29 / Edit Report Only Deal – Message Type 26	<ul style="list-style-type: none"> • Addition: Cleared Flag - Indicates if this order is intended to be cleared or not. • Amendment: Counterparty - This field may be left blank for the market where trade anonymity applies 	Change to existing message	IRD & Cash Bonds
Contract Dates – Number 3	<ul style="list-style-type: none"> • Addition: Price Multiplier - The price multiplier used for bond instruments 	Change to existing message	IRD & Cash Bonds
Fee Setups – Number 157	<ul style="list-style-type: none"> • The fee setups applied over different instruments. 	New message	IRD & Cash Bonds
Error Messages:	<ul style="list-style-type: none"> • New error messages added for CCP validations 	Change to existing message	IRD & Cash Bonds
Daily Account Summary – Number 70	<ul style="list-style-type: none"> • Addition: CVM - Indicates the CVM calculated during the spot bond margin process • Addition: Clearing Fee – Clearing Fee applicable • Addition: Regulatory Fee – Regulatory Fee applicable • Addition: Fee 1 - Future use • Addition: Fee 2 - Future use 	Change to existing message	IRD & Cash Bonds



Nutron API Messages – Data for Replication of Margin Methodologies

These messages apply primarily to Clearing Members.

MarginBreakdown – Number 149	Provides a detailed breakdown of all the margin components per principal to simplify the balancing process allowing the clearing members to download and isolate the component that does not balance for troubleshooting	New message	IRD & Cash Bonds
External sEAD– Number 155	Provides the external sEAD to incorporate other markets into the large exposure add-on calculation.	New message	IRD & Cash Bonds
Netting Groups – Number 148	Provides all the netting groups available to link to instruments for VaR margining	New message	IRD & Cash Bonds
LEAOPnl– Number 150	Provides PnL arrays required for calculating the sVM in the LEAO margin calculation.	New message	IRD & Cash Bonds
VaRPnl– Number 151	Provides PnL arrays required to replicate the minimum, FHS and Stressed components of VaR.	New message	IRD & Cash Bonds



ConcentrationPnl– Number 152	Provides PnL arrays for calculating concentration margin.	New message	IRD & Cash Bonds
BondOptionPnl– Number 153	Provides PnL arrays for calculating bond option margin.	New message	IRD
HedgeCostMatrix– Number 154	Provides the hedge cost matrix for balancing concentration margin.	New message	IRD & Cash Bonds
Margin Parameters– Number 156	Provides the global margin parameters per contract type to calculate the different margin methodologies.	New message	IRD & Cash Bonds



6.2 BOND CCP TEST CASES

6.2.1 Instruments Data – Message #2

Test Case ID	Applicable Participant	Mandatory
CCP1	Trading Member & Clearing Member	Y
Description: Validate the Instruments Data message.		
Trigger: New, updated or current instrument published via Message #2		
Activity Steps		
#	Test Step	Expected Result
1	Receive Instruments Data for an instrument configured as eligible for CCP clearing in the cash bonds market.	Eligible For CCP Clearing = true ID Netting Group present per instrument configuration. Message #2 downloads successfully.
2	Receive Instruments Data for instruments that are not eligible for CCP clearing in the cash bonds market.	Eligible For CCP Clearing = false. ID Netting Group present per instrument configuration. Message #2 downloads successfully.
3	Receive Instruments Data for instruments that are not eligible for CCP clearing in the Interest Rate Derivative market.	Eligible For CCP Clearing = false. ID Netting Group present per instrument configuration. Message #2 downloads successfully.
4	Validate schema, data types and field lengths.	Message conforms to schema; no validation errors.

6.2.2 Member Data – Message #15

Test Case ID	Applicable Participant	Mandatory
CCP2	Trading Member & Clearing Member	Y
Description: Validate Member Data		
Trigger: Member data published via Message #15		
Activity Steps		
#	Test Step	Expected Result
1	Receive Member Data for a member who is eligible for clearing in the cash bonds market.	Bonds Cleared = true present; message #15 loads successfully.
2	Receive Member Data for a member who is not eligible for clearing in the cash bonds market.	Bonds Cleared = false, message #15 loads successfully.
3	Receive Member Data in the Interest Rate Derivative market.	Message #15 loads successfully.

6.2.3 Clearing Member Data – Message #65

Test Case ID	Applicable Participant	Mandatory
CCP3	Clearing Member & Trading Member	Y
Description: Validate Clearing Member Data		
Trigger: Clearing Member Data published via Message #65.		
Activity Steps		
#	Test Step	Expected Result
1	Receive Clearing Member Data in the cash bonds market.	Message #65 loads successfully.

2	Receive Clearing Member Data in the Interest Rate Derivative market.	Message #65 loads successfully.
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6.2.4 Report-Only Trade – Insert #29 / Edit #26

Test Case ID	Applicable Participant	Mandatory
CCP4	Trading Member	Y
Description: Member submits a message to capture a Cleared Report Only Spot Bond / Repo Trade.		
Trigger: The Member must be logged in and have permission and rights to submit an API message to the JSE Trading engine.		
Activity Steps		
#	Test Step	Expected Result
1	Submit Message Type 29 to report a Cleared Report Only Spot Bond / Repo trade	Cleared Report Only Spot Bond / Repo trade submitted successfully. Receive a success ack (message type 123, file identifier 140) If the message has failed, receive announcement message type number 125
2	Record the details of message type 123 - 140	



Test Case ID	Applicable Participant	Mandatory
CCP5	Trading Member	Y
Description: Member submits a message to edit an unmatched Cleared Report Only Spot Bond / Repo Trade.		
Trigger: The Member must be logged in and have permission and rights to submit an API message to the JSE Trading engine.		
Activity Steps		
#	Test Step	Expected Result
	Submit Message Type 26 to edit an unmatched Cleared Report Only Spot Bond / Repo trade	Unmatched Cleared Report Only Spot Bond / Repo trade edited successfully. Receive a success ack (message type 123, file identifier 140) If the message has failed, receive announcement message type number 125
	Record the details of message type 123 - 140	

6.2.5 Report-Only Trade – Insert #29 / Edit #26

Test Case ID	Applicable Participant	Mandatory
CCP6	Trading Member	Y
Description: Member submits a message to capture a Non-cleared Report Only Spot Bond / Repo Trade		
Trigger: The Member must be logged in and have permission and rights to submit an API message to the JSE Trading engine.		

Activity Steps		
#	Test Step	Expected Result
1	Submit Message Type 29 to report a Non-cleared Report Only Spot Bond / Repo trade	Non-cleared Report Only Spot Bond / Repo trade submitted successfully. Receive a success ack (message type 123, file identifier 140) If the message has failed, receive announcement message type number 125
2	Record the details of message type 123 - 140	

Test Case ID	Applicable Participant	Mandatory
CCP7	Trading Member	Y
Description: Member submits a message to edit an unmatched Non-cleared Report Only Spot Bond / Repo Trade		
Trigger: The Member must be logged in and have permission and rights to submit an API message to the JSE Trading engine.		
Activity Steps		
#	Test Step	Expected Result
	Submit Message Type 26 to edit an unmatched Non-cleared Report Only Spot Bond / Repo trade	Unmatched Non-cleared Report Only Spot Bond / Repo trade edited successfully. Receive a success ack (message type 123, file identifier 140) If the message has failed, receive announcement message type number 125
	Record the details of message type 123 - 140	



6.2.6 Report-Only Trade – Insert #29 / Edit #26

Test Case ID	Applicable Participant	Mandatory
CCP8	Trading Member	Y
Description: Member submits a message to capture a Report Only Interest Rate Derivative Future / Option Trade		
Trigger: The Member must be logged in and have permission and rights to submit an API message to the JSE Trading engine.		
Activity Steps		
#	Test Step	Expected Result
1	Submit Message Type 29 to report a Report Only Interest Rate Derivative Future / Option trade.	Report Only Interest Rate Derivative Future / Option trade submitted successfully. Receive a success ack (message type 123, file identifier 140) If the message has failed, receive announcement message type number 125
2	Record the details of message type 123 - 140	

Test Case ID	Applicable Participant	Mandatory
CCP9	Trading Member	Y
Description: Member submits a message to edit an unmatched Report Only Interest Rate Derivative Future / Option Trade		
Trigger: The Member must be logged in and have permission and rights to submit an API message to the JSE Trading engine.		



Activity Steps		
#	Test Step	Expected Result
	Submit Message Type 26 to edit an unmatched Report Only Interest Rate Derivative Future / Option trade	Unmatched Report Only Interest Rate Derivative Future / Option trade edited successfully. Receive a success ack (message type 123, file identifier 140) If the message has failed, receive announcement message type number 125
	Record the details of message type 123 - 140	

6.2.7 Unmatched Deal Data – Message #10

Test Case ID	Applicable Participant	Mandatory
CCP10	Trading Member	Y
Description: Validate Cleared Flag presence		
Trigger: Member submits a message to capture a Cleared Report Only Spot Bond / Repo Trade.		
Activity Steps		
#	Test Step	Expected Result
1	Receive Unmatched Deal Data for a trade intended for clearing.	ClearedFlag = true present in Message #10 Message loads successfully.



Test Case ID	Applicable Participant	Mandatory
CCP11	Trading Member	Y
Description: Validate Unmatched Deals Data Download		
Trigger: Member submits a message to capture a Non-cleared Report Only Spot Bond / Repo Trade.		
Activity Steps		
#	Test Step	Expected Result
1	Receive Unmatched Deal Data for a non-cleared trade in the cash bonds market.	Unmatched Deals Data Message #10 loads successfully.

Test Case ID	Applicable Participant	Mandatory
CCP12	Trading Member	Y
Description: Validate Unmatched Deals Data Download		
Trigger: Enter a Report Only Interest Rate Derivatives Future / Option Trade		
Activity Steps		
#	Test Step	Expected Result
1	Receive Unmatched Deal Data for a trade in the Interest Rate Derivatives market.	Unmatched Deals Data loads successfully Message #10



6.2.8 Deals Data – Message #8

Test Case ID	Applicable Participant	Mandatory
CCP13	Trading Member	Y
Description: Validate new fields (Execution Venue, External IDs, Cleared Flag, Clean Price, Accrued Interest) and amended Counterparty behaviour.		
Trigger: <ol style="list-style-type: none"> 1) New trade submitted in the cash bonds market where cleared flag = true (cleared) 2) ETP trade published 		
Activity Steps		
#	Test Step	Expected Result
1	Submit a spot & repo (buy sell back) transaction as a cleared trade in the cash bonds market.	Trade Execution Venue = JSE External Exchange Trade ID = blank (no external exchange reference for JSE trades) External Deal ID = blank ((no external exchange reference for JSE trades) Cleared Flag = true Deals Data message #8 loads successfully
3	Receive a ETP trade (all ETP trades are cleared)	Trade Execution Venue = ETP External Exchange Trade ID is populated, as ETP trades originate from an external exchange External Deal ID is populated, representing the external deal reference Cleared Flag = true Clean Price reflects the clean price captured at the time of trade



		<p>execution</p> <p>Accrued Interest reflects the accrued interest value</p> <p>Counterparty = blank (anonymity rules apply)</p> <p>All other fields contain accurate and valid data, consistent with the instrument and trade details</p> <p>Deals Data message #8 loads successfully</p>
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Test Case ID	Applicable Participant	Mandatory
CCP14	Trading Member	Y
Description: Validate Deals Data Download		
Trigger:		
1) Enter a Report Only Interest Rate Derivatives Future / Option Trade		
Activity Steps		
#	Test Step	Expected Result
1	Submit a report only Interest Rate Derivative Future / Option trade.	Deals Data message #8 loads successfully

Test Case ID	Applicable Participant	Mandatory
CCP15	Trading Member	Y
Description: Validate Deals Data Download		
Trigger:		
1) Enter a Report Only Spot Bond / Repo Non-cleared Trade		



Activity Steps		
#	Test Step	Expected Result
1	Download Deals Data in the cash bonds market	Deals Data downloads successfully message #8

6.2.9 Completed/Unsettled Orders – Message #7 & Unconfirmed Orders – Message #6

Test Case ID	Applicable Participant	Mandatory
CCP16	Trading Member	Y
Description: Validate new fields (Execution Venue, External ID, Settled, Cleared Flag, Counterparty)		
Trigger:		
<ol style="list-style-type: none"> 1) New trade submitted in the cash bond market where cleared flag = false (non-cleared) 2) New trade submitted in the cash bond market where cleared flag = true (cleared) 3) ETP trade published 		
Activity Steps		
#	Test Step	Expected Result
1	Submit a Report Only Non-cleared spot & repo trade.	Trade Execution Venue = JSE The execution venue of the trade. External Exchange Trade ID = blank Settled - Indicates if the order has been settled – this step is dependent on the settlement date and will reflect settled only if it has been settled by Strate. External Deal ID = blank Cleared Flag = false



		<p>Counterparty populated with the actual counterparty to the trade</p> <p>All other fields in the message contain accurate and valid data, consistent with the instrument and trade details</p> <p>Message #7 & #6 loads successfully</p>
2	Submit a Report Only Cleared spot & repo trade.	<p>Trade Execution Venue = JSE The execution venue of the trade.</p> <p>External Exchange Trade ID = blank</p> <p>Settled - Indicates whether the order has been settled. This value is dependent on the scheduled settlement date and will reflect 'Settled' only once confirmation has been received from Strate."</p> <p>External Deal ID = blank</p> <p>Cleared Flag = true</p> <p>Counterparty populated with the actual counterparty to the trade</p> <p>All other fields in the message contain accurate and valid data, consistent with the instrument and trade details</p> <p>Message #7 & #6 loads successfully</p>
3	Receive a ETP trade (all ETP trades are cleared)	<p>Trade Execution Venue = ETP</p> <p>External Exchange Trade ID = populated with the Exchange trade ID received from the trading venue</p> <p>Settled - Indicates whether the order has been settled. This value is dependent on the scheduled settlement date and will reflect 'Settled' only once confirmation has been received from Strate."</p> <p>External Deal ID = populated with the deal reference received from the trading venue</p> <p>Cleared Flag = true</p>



		Counterparty = blank All other fields in the message contain accurate and valid data, consistent with the instrument and trade details. Message #7 & #6 loads successfully
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Test Case ID	Applicable Participant	Mandatory
CCP17	Trading Member	Y
Description: Validate Completed Orders/Unsettled Orders Download successfully		
Trigger: 1) Submit a report only Interest Rate Derivative Future / Option trade.		
Activity Steps		
#	Test Step	Expected Result
1	Download Completed Orders/Unsettled Orders message in the Interest Rate Derivative market.	Completed Orders/Unsettled Orders download successfully message #7 and #8

6.2.10 Daily Account Summary – Message #70

Test Case ID	Applicable Participant	Mandatory
CCP18	Clearing Member	Y
Description: Validate new fields (CVM, Clearing Fee, Regulatory Fee, Fee1, Fee2)		
Trigger: 1) End of Day Run process complete		
Activity Steps		
#	Test Step	Expected Result



1	EOD run complete by JSE Clear	CVM = populated with a value, provided the client has cleared trades that remain unsettled. Clearing Fee = populated with a value Regulatory Fee = populated with a value Fee1 = blank Fee2 = blank
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Test Case ID	Applicable Participant	Mandatory
CCP19	Trading member & Clearing Member	Y
Description: Validate the new field price multiplier for bond instruments in the cash bonds market		
Trigger: Receive Contract Dates message		
Activity Steps		
#	Test Step	Expected Result
1	Receive Contract Dates message	Price Multiplier present for bond instruments

Test Case ID	Applicable Participant	Mandatory
CCP20	Trading member & Clearing Member	Y
Description: Validate contract dates download successfully in the Interest Rate Derivatives market		
Trigger: Receive Contract Dates message		
Activity Steps		
#	Test Step	Expected Result
1	Receive Contract Dates message	Download successfully message #3



6.2.11 Fee Setups – Message #157

Test Case ID	Applicable Participant	Mandatory
CCP21	Clearing Member	Y
Description: Validate availability of fee setups per instrument		
Trigger: Fee setup published		
Activity Steps		
#	Test Step	Expected Result
1	Request/receive Fee Setups message #157	Message received with instrument-scoped fee definitions; success.

6.2.12 MarginBreakdown – Message #149

Test Case ID	Applicable Participant	Mandatory
CCP22	Clearing Member	Y
Description: Validate presence of detailed margin components per principal for balancing		
Trigger: EOD Margin run completes; breakdown published		
Activity Steps		
#	Test Step	Expected Result
1	Receive MarginBreakdown components	All components present and sum to total margin; parsing successful.

6.2.13 External sEAD – Message #155

Test Case ID	Applicable Participant	Mandatory
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CCP23	Clearing Member	Y
Description: Validate external sEAD values for large exposure add-on replication		
Trigger: New sEAD array published; margin run complete		
Activity Steps		
#	Test Step	Expected Result
1	Receive External sEAD	sEAD arrays present; data types correct
2	Integrate into final LEAO calculation	Final LEAO rollup calc considers the external sEAD from other markets, without errors; totals reconcile

6.2.14 Netting Groups – Message #148

Test Case ID	Applicable Participant	Mandatory
CCP24	Clearing Member	Y
Description: Validate availability of netting groups and linkage to instruments for VaR replication		
Trigger: Netting groups published, margin run complete		
Activity Steps		
#	Test Step	Expected Result
1	Receive Netting Groups	Netting groups present with identifiers
2	Ensure instruments are linked to correct netting group and run margin	Margin calculation uses correct group; results reconcile

6.2.15 LEAOPnl – Message #150

Test Case ID	Applicable Participant	Mandatory
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CCP25	Clearing Member	Y
Description: Validate PnL arrays used for calculating sVM in LEAO margin replication		
Trigger:		
<ul style="list-style-type: none"> 1) Arrays published post margin run 2) Margin run complete 		
Activity Steps		
#	Test Step	Expected Result
1	Receive LEAOPnl arrays	PnL arrays complete;
2	Calculate sVM using arrays	sVM and LEAO calculation reconciles with margin breakdown components for Cash bonds and IRD

6.2.16 VaRPnl – Message #151

Test Case ID	Applicable Participant	Mandatory
CCP26	Clearing Member	Y
Description: Validate arrays for calculating Minimum, FHS, and Stressed VaR replication		
Trigger:		
<ul style="list-style-type: none"> 1) Arrays published post margin run 2) Margin run complete 		
Activity Steps		
#	Test Step	Expected Result
1	Receive VaRPnl	Arrays labelled per VaR component; data complete
2	Calculate VaR components using arrays	VaR, calculation reconciles with margin breakdown components for Cash bonds and IRD.

6.2.17 ConcentrationPnl – Message #152

Test Case ID	Applicable Participant	Mandatory
CCP27	Clearing Member	Y
Description: Validate arrays for calculating concentration margin replication		
Trigger: 3) Arrays published post margin run 4) Margin run complete		
Activity Steps		
#	Test Step	Expected Result
1	Receive ConcentrationPnl	Arrays received; schema valid
2	Calculate concentration margin using arrays	Concentration margin calculation reconciles with margin breakdown components for Cash Bonds and IRD.

6.2.18 BondOptionPnl – Message #153

Test Case ID	Applicable Participant	Mandatory
CCP28	Clearing Member	Y
Description: Validate arrays for calculating bond option margin (IRD) replication		
Trigger: 1) Arrays published post margin run 2) Margin run complete		
Activity Steps		
#	Test Step	Expected Result

1	Receive BondOptionPnl	Arrays received; schema valid.
2	Calculate option margin using arrays	Bond Options calculation reconciles with margin breakdown components for IRD.

6.2.19 HedgeCostMatrix – Message #154

Test Case ID	Applicable Participant	Mandatory
CCP29	Clearing Member	Y
Description: Validate hedge cost matrix for balancing concentration margin		
Trigger:		
<ul style="list-style-type: none"> 1) Receive Matrix details 2) Margin run complete 		
Activity Steps		
#	Test Step	Expected Result
1	Receive HedgeCostMatrix	Matrix details received with correct information
2	Hedge cost matrix applied in Concentration margin calculation	Concentration margin calculation reconciles with margin breakdown components for Interest Rate Derivative and Cash Bond markets

6.2.20 Margin Parameters – Message #156

Test Case ID	Applicable Participant	Mandatory
CCP30	Clearing Member	Y
Description: Validate global margin parameters per contract type		
Trigger:		
<ul style="list-style-type: none"> 1) Parameters published post margin run 		

2) Margin run complete		
Activity Steps		
#	Test Step	Expected Result
1	Receive Margin Parameters	All parameter sets present; parse success
2	Calculate final EOD margin using the global parameters	Final EOD margin reconciles with the margin numbers published in the Daily Account Summary

7. Standard Conformance Messages

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

Message Type No	File Identifier	Message
Login		
0		Login
84		HeartBeat
88		Change password
4		Logout
Data Downloads		



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
Subscription		
99		Future Subscription
67		Option Subscription
42		Unsubscribe
7		Change Dealer Message Subscription
142		Subscribe to futures closeout publishing iterations
3		Re-request depth
Order Entry		
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
Order Management		
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
Report Only Messages		
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
Entity Management		
102		Create Client
56		Load order on newly created client
Deal Management		
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

