Bond CCP & Repo Reporting Reform Project

Market End-to-End Testing Briefing

17 July 2026

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Session roadmap

Today's path to market testing readiness

Purpose, scope and cycle structure.

01 **Purpose & Overview**

02 **Scope of Testing**

03 **Test Cycles**

Roles and scenarios to execute.

04 **Participant Responsibilities**

05 **High-level Test Scenarios**

Issue support and date alignment.

06 **Issue Management**

07 **Go-live Date Update**

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01

Purpose and Overview

Aligning on market testing expectations, scope and readiness milestones.

Purpose and Overview

SESSION OBJECTIVE

Align all participants on market testing expectations.

What we'll cover

1. Scope of testing and testing scenarios
2. Testing cycles and participant responsibilities
3. Issue management and sign-off

Readiness milestone

The market end-to-end testing phase is designed to validate the complete market ecosystem under production-like conditions and confirm readiness for market acceptance testing, dress rehearsals, and go-live.

Go-live date discussion

Review the Bond CCP go-live date of 21 November 2026 as requested by market participants in light of year-end freeze periods and the LCH ZARONIA go-live.

Scope of Testing

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Scope of Testing

Core Bond CCP Test Coverage

Three focused validation streams covering trade flow, settlement and clearing member processing.

Trade Execution & Clearing 01

Execution and processing of cleared bond trades, including ETP trades and eligible IRC reported trades if applicable.
Validation of trade lifecycle events, trade status updates, and system processing.
Validation of reports and other BAU activities.

Settlement Processing 02

Validation of settlement lifecycle processing, including CSDP and Strate operational processing; trade commitment, back-to-back linking, settlement processing and support activities.

Clearing Member Processing 03

ETP & IRC cleared trade receipt and processing, margin calculation and validation, fee calculation and validation, reporting, reconciliation activities and operational readiness procedures

Free Form Testing focus: integrated processing, reconciliation, issue resolution and participant readiness

Regression Testing, Classic & Triparty Repo's & Operational Readiness coverage

Regression Testing 01

Regression testing of the existing Cash Bonds Market (Reported) and Interest Rate Derivatives Market (IRD) to confirm no adverse impact resulting from the Bond CCP implementation.

Classic & Triparty Repo's 02

Participants may elect to perform: Classic Repo and/or Triparty Repo end-to-end testing.

Operational Readiness 03

Execution and validation of business-as-usual (BAU) scenarios to confirm operational readiness and support processes ahead of go-live.

BAU stability validated

Test Cycles

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Testing Cycles

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Execute scenarios, retest fixes and confirm readiness.

1	**Cycle 1**	**03–21 Aug 2026**	**Full scenario execution** Test all scenarios in Cycle 1 to ensure any issues are identified early.
2	**Cycle 2**	**26 Aug–23 Sep 2026**	**Targeted retesting** Retest Cycle 1 fixes and confirm that no new issues have been introduced.
3	**Cycle 3**	**28 Sep–16 Oct 2026**	**Readiness confirmation** Confirm no critical or high-priority issues remain unresolved.

Sign-off

Submit sign-off when testing is complete. If Cycle 1 is complete, submit before Cycle 2.
Note: If sign-off is received and issues arises which requires retesting, you will be required to retest the scenario and provide sign-off.

Participant Responsibilities

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Participant Responsibilities

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Role-specific responsibilities support successful market-wide execution

1. **JSE Clear**
   Monitor progress, support issue triage, perform clearing and end-of-day activities.

2. **Clearing Members**
   Process cleared trades & IRD trades, perform daily EOD balancing against JSE Clear, troubleshoot discrepancies, validate margin and fee outputs, provide reporting to Primary Dealers.

3. **Trading Members / Primary Dealers**
   Execute required ETP and IRC cleared trade scenarios, validate Nutron/API functionality, validate system processing, validate settlement flows, validate trade lifecycle events, validate status updates, perform regression testing for Cash Bond market (reported trades) and Interest Rate Derivative market (IRD).
   Optional testing for Classic repos & Triparty repos.

4. **CSD Participants**
   Support settlement lifecycle activities, commit to trades, apply back-to-back links and validate settlement processing.
   Ensure test systems have current production instruments active.

5. **Strate**
   Settlement instruction processing, processing of settlement and provide support where required.
   Ensure test systems have current production instruments available.

Participant Responsibilities

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Role-specific responsibilities support successful market-wide execution

6 **Software Providers**
Support participants, resolve software-related issues, confirm configuration readiness and provide fixes where required.

7 **Information Subscribers**
Users with direct connections to the Nutron API are required to validate API message consumption and perform regression testing.

High-level Test Scenarios

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High-level Test Scenarios

Scenario Area	Scenario	Expected Outcome	Primary Participants
Trade Execution	Execute ETP bond trade.	Trade is received, visible in the relevant participant systems.	Primary Dealers, Clearing Members
Trade Execution **(optional) depends if you elect to clear trades.**	Execute eligible cleared reported bond trade via the Nutron API/front-end.	Trade is received, marked for clearing and visible in the relevant participant systems.	Primary Dealers, Clearing Members
Trade Validation	Validate cleared reported bond trade settlement date and repurchase date rules.	Trades outside agreed eligibility rules are rejected or prevented as expected.	Primary Dealers, Software Providers
Trade Management	Process equal and opposite trades.	Trade updates are processed correctly and reflected in participant systems.	Primary Dealers, Clearing Members
Trade Cancellation	Cancel a cleared reported bond trade before the applicable cut-off.	Cancellation is processed successfully and reflected in reports and status updates.	Primary Dealers, Clearing Members
Status Intimations	Receive and process real-time trade and status intimations.	Participants receive expected messages and can reconcile trade status.	Primary Dealers, Clearing Members

High-level Test Scenarios

Scenario Area	Scenario	Expected Outcome	Primary Participants
Settlement	Receive settlement instructions and commit to trades.	Settlement instructions are received and committed as expected.	CSDPs, Strate
Settlement	Apply back-to-back links.	Back-to-back links are applied and settlement processing progresses as expected.	CSDPs, Strate
Reports	Receive and review reports.	Reports are generated, received and reconciled by participants.	Clearing Members, Primary Dealers
Intraday Margin	Run an intraday margin call and download relevant data.	Intraday margin call is processed and relevant outputs are available.	Clearing Members, JSE Clear
End-of-Day Processing	Execute end-of-day processing.	EOD completes successfully and outputs are available for balancing. Participant records reconcile to JSE Clear outputs, or discrepancies are investigated and resolved.	JSE Clear, Clearing Members
Classic Repo / Triparty Repo	Test applicable repo functionality and enhancements where used by the participant.	Repo functionality performs as expected.	Optional for Trading Members

High-level Test Scenarios | Regression Testing

Market / Function	Regression Activity	Expected Outcome	Primary Participants
Cash Bonds Reported Market	Execute trade capture, deal management, amendments and cancellations where applicable.	Existing BAU functionality continues to operate without adverse impact.	Trading Members
Interest Rate Derivatives Market	Execute standard IRD trade and position management activities.	IRD processing remains unaffected by Bond CCP changes.	Trading Members
API Users	Validate message consumption for impacted and non-impacted API flows.	Messages are received, interpreted and processed correctly.	Trading Members
Settlement	Validate current settlement flows and system updates.	Settlement flows and system updates function correctly.	Trading Members
Settlement	Receive, process and commit to trades.	Trades are received and committed as expected.	Strate, CSDPs
Settlement	Apply back-to-back links.	Back-to-back links are applied and settlement processing progresses as expected.	Strate, CSDPs

Issue Management & Support

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Issue Management & Support

Early issue logging and evidence-based retesting reduce readiness risk

1 **Logging issues**

Log issues as soon as they are identified with the JSE CSC team email customersupport@jse.co.za

2 **Provide evidence**

Attach references, timestamps and screenshots.

3 **Prioritise severity**

Track critical issues through to resolution before exit.

4 **Retest fixes**

Retest resolved issues in the next applicable cycle.

5 **Confirm closure**

Confirm closure once validation is complete.

Go-live Date Update

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Project date updates

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Balancing Testing

CTS

18 May – 31 Jul
Clearing Members
System testing and end-of-day balancing to JSEC

18 May – 31 Jul
Participants Internal Testing

Full Market ETE Testing

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03 Aug – 21 Aug
Cycle 1
All Participants

26 Aug – 23 Sep
Cycle 2
All Participants

28 Sep – 16 Oct
Cycle 3
All Participants

Market Acceptance Testing

CTS

19 Oct – 30 Oct
Cycle 1
All Participants

Market-facing dress rehearsals
10 Oct & 07 Nov 2026
Go-live: 07 November

Thank you

Q&A

Should you have any questions or require further clarity please reach out to customersupport@jse.co.za

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Appendix

High-level stakeholder technical impacts

High-level stakeholder technical impacts

Clearing Members

Impact

- GCMS Updates
  - API changes
  - Implementation of the new risk methodology for cleared bonds & IRD market.
  - Changes to the daily account summary
- Other reporting and accounting changes
- Downstream integration
- Clearing agreements with primary dealers

Note:

Required to cover client with stock if client cannot meet settlement obligations

Primary Dealers (PDs)

No impact to ETP trading

Impact

- ETP trades and status intimations available via Nutron API & Nutron front end
- Nutron API changes for the Reported market
- Margin and clearing fees via Clearing Member (using new margin methodology)
- Reporting changes
- Downstream system integration work

Trading Members (Non-PDs)

Impact

- Nutron API changes for Interest Rate Derivatives and Interest Rate Markets
- Updated Nutron front end

Software Providers

Impact

- Nutron API changes – **This applies to all Software providers that provide services for the IRD and IR market**

Information Subscribers

Impact

- Users with direct access to the Nutron API should assess the impact of the API changes on their systems.

High-level stakeholder technical impacts

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STRATE

- No changes to the existing settlement model
- Gross settlement to continue in CCP model
- No changes to current swift message structures

Impact

- Strate will receive settlement instructions from JSE Clear
- ETP trades will be populated with the JSE Clear BIC code in the header of the settlement instruction message and a new BP ID will be assigned.
- IRC cleared trades will be populated with the JSE Clear BIC code in the header of the settlement instruction message and a new BP ID will be assigned.
- Strate to generate Strate trade leg no. for ETP trades using the same logic as is currently used in the reported market
- Bond ETP trades will now be received from JSE Clear (MTS link disabled)
- JSE Clear will send ETP trade cancellations directly to Strate
- Masking of counterparty on ETP trades will still be applicable
- Involvement of Strate in the event of a clearing member and trading member default.

CSDPs

- No change to the existing settlement model
- Gross settlement to continue in CCP model
- No changes to current swift message structures

Impact

- ETP trades will be populated with a new BP ID which is linked to JSE Clears BIC code XJSEZAJJSF2.
- IRC cleared trades will be populated with a new BP ID linked to JSE Clears BIC code XJSEZAJXXSF1.
- Strate trade leg no. for ETP trades will use the same logic as is currently used for reported trades.
- SWIFT messages from Strate for ETP trades & IRC cleared trades will be populated with the Guaranteed Indicator = ‘N’.
- Involvement of CSDPs in the event of a clearing member and trading member default (process change only).

Phase 3 – Market End-to-End Testing | Participant Responsibilities

Software Providers

- Confirm that all previous issues reported by clients have been resolved
- Provide support to clients throughout this phase.

Strate (CSD)

- Perform daily operational activities of a CSD.

CSDPs

- Perform daily operational activities of a CSDP.
- Ensure back-to back links are tested exactly as they would operate in a live production environment

Clearing Members

- Perform full daily clearing operations for the duration of the 3 test cycles.
- Ensure daily reconciliation with CCP.

Phase 3 – Market End-to-End Testing | Participant Responsibilities

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Trading Members (Primary Dealers)

- Simulate realistic trading patterns on the Bond ETP and Nutron Reported markets. Ensure Reported market trades are flagged as 'cleared'.
- Ensure all ETP trades and cleared Reported market trades are margined & correct fees calculated at end-of-day by your Clearing member.
- Ensure settlement of cleared trades.
- Ensure reporting received from your Clearing member is as expected.
- Ensure final verification is completed and all critical business processes are working as expected.

Trading Members (Cash Bonds Reported Market)

- Perform regression testing on integrated systems to ensure the Bond CCP changes do not affect existing Bond and Buy-Sell-Back Repo trading and settlement processes.

Trading Members (Interest Rate Derivatives)

- Perform regression testing on integrated systems to ensure the Bond CCP changes do not affect existing derivative trading and clearing processes.

Bond Trading Members (Classic/Triparty Repos)

- This is non-mandatory testing for members using this functionality.
- Test the functionality and enhancements included in the software release.

Information Subscribers

- Users with direct connections to the Nutron API who are impacted by the API message changes are required to run a series of tests to ensure their systems remain fully functional.
- Users with direct connections to the Nutron API and are not affected by the API changes are required to perform regression testing.

Overview of Test Phases

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TESTING PHASE	DATES	PHASE	KEY OBJECTIVES
Phase 1 **Technical Integration & Preparation**	02 Mar–30 Jun	Technical readiness	• JSEC deploy the Bond CCP code and establish technical connectivity in CTS. • Stakeholders complete all software development requirements ○ internal development ○ SWP development ○ complete & pass conformance testing. • Confirm JSE Clear–Strate integration and settlement messaging flow. • Confirm JSE Clear–Strate-CSDP integration and settlement messaging flow.
Phase 2 **Stakeholder Internal Testing & Clearing Member Testing**	18 May–31 Jul	Participant readiness	• Stakeholder internal testing allow participants to test their systems/software before end-to-end testing commences. • Clearing members run simulated daily activities in the parallel environment. • Validate all critical issues are resolved before moving to ETE testing.
Phase 3 **Market End-to-End Testing**	03 Aug–16 Oct	Market validation	• Execute full market ecosystem validation across participants through Cycles 1-3 • Confirm all workflows function end-to-end i.e.; trading, clearing, margining, settlement etc. • Validate fixes from earlier cycles and ensure no critical or high-priority issues remain.
Phase 4 **Market Acceptance Testing & Dress Rehearsals**	19 Oct–30 Oct	Final readiness	• Complete final targeted testing of all business processes. • Conduct go-live market dress rehearsals to establish connection to JSE production environment. • Obtain final participant readiness sign-off