



JSE Clear Bond CCP Market Facing Test Overview

March – November 2026

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1. Project Overview

The Bond CCP Project is an industry-wide initiative led by JSE Clear to introduce central counterparty clearing for South African bond transactions. ETP trades will be subject to mandatory clearing, while IRC trades may be elected for clearing if they meet the applicable clearing criteria. The CCP will replace bilateral settlement, reduce counterparty risk and enhance market stability.

The transition requires updates to systems and/or processes by market stakeholders (Primary dealers, Trading members, Clearing members, Central Securities Depository Participants (CSDPs), Strate, Information Subscribers). To ensure a secure and orderly go-live JSE Clear has structured a testing program into four phases (March–November 2026), each with specific objectives and entry/exit criteria.

JSE Clear coordinates each phase, achieving the exit criteria in each phase before moving to the next phase of testing.

Testing Phases Overview:

Phase	Timeline	Focus	Key Objectives
Phase 1 – Technical Integration & Preparation	Mar–Jun 2026	Establish technical foundation	<ul style="list-style-type: none"> Deploy CCP code in test environment. Complete software/interface updates and technical accreditation. Integrate JSE Clear with Strate (settlement instructions). Conduct early settlement trials with CSDP's. Verify no impact on other markets (Interest Rate Derivatives / Cash Bonds Reported Market (non-cleared bonds)). Prior to the start of Phase 2 Stakeholder Internal Testing, stakeholders should ensure they have CTS access. To verify or request access, please contact our CSC team at CustomerSupport@jse.co.za.
Phase 2 – Internal Testing & Parallel Run	May–Jul 2026	Participant readiness	<ul style="list-style-type: none"> In-house testing by all participants (Primary Dealers, Clearing Members, Trading Members, Information Subscribers.). Strate & CSDPs to provide any technical or operational support. JSE Clear & Clearing members simulate daily CCP operations in parallel testing. Resolve internal issues before market end-to-end testing.
Phase 3 – Market-End-to-End Testing	Jul–Oct 2026	Market validation	<ul style="list-style-type: none"> Three end-to-end test cycles (all participants). Simulate normal trading days and clearing operations. Confirm end-to-end workflows. Validate fixes from earlier cycles and ensure no critical or high-priority issues remain.

Phase 4 – Market Acceptance & Dress Rehearsals	Oct–Nov 2026	Final readiness check	<ul style="list-style-type: none"> • Two acceptance test cycles to execute final critical tests (all participants). • Perform two mandatory go-live market dress rehearsals. • Obtain participant signoffs and determine readiness for go-live across all market participants & stakeholders.
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Each phase is detailed below for the relevant testing phase and includes:

- Purpose & Scope.
- Timeline & Milestones.
- Participant Responsibilities.
- Entry/Exit Criteria.

2. Technical Integration & Preparation – Phase 1 (March to June 2026)

2.1. Purpose & Scope

Phase 1 lays the technical groundwork for the Bond CCP testing phase. Key objectives:

- Deployment of the Bond CCP solution in the customer test environment (CTS) with initial configurations.
- Complete required software upgrades (trading & clearing systems / other) and allow for early software provider conformance testing.
- Integrate JSE Clear’s systems with Strate (CSD) to ensure settlement instructions flow correctly through the CCP.
- Conduct early settlement trials with CSDPs in April to verify that CCP-novated trades settle via Strate’s delivery-versus-payment (DvP) & receipt-versus-payment (RvP) process without issues (contingency dates planned in May if required).
- Confirm that changes have no adverse impact on other markets (e.g., Interest Rate Derivatives & Cash Bonds Reported market) by running regression tests on integrated systems.

2.2. Timeline & Milestones

- **Early March 2026:** Customer Test environment available
 - Bond CCP code deployed in JSE Clear’s Customer Test Service (CTS); initial JSE Clear–Strate connectivity established.
- **March to April 2026:** Development & integration testing
 - Software providers finalise Bond CCP system/software updates and begin formal conformance testing in CTS.
 - JSE Clear and Strate perform end-to-end interface testing (trade novation through to settlement messaging).
- **7 to 17 April 2026:** CSDP Test Window 1
 - First round of testing where CSDP’s process CCP settlement instructions in CTS.
- **1 to 15 May 2026:** Contingency CSDP Test Window 2

- Second round of CSDP CCP settlement tests (to re-test any adjustments from Window 1).
- **Mid-May 2026:** Clearing members receive software from their software provider.
- **By 30 June 2026:** Phase 1 completion
 - Technical setup and integration completed & all critical issues resolved.
 - Conformance testing to be completed and passed by 30 June 2026. JSE Clear assesses readiness to proceed to Phase 2.

2.3. Participant Responsibilities

- **JSE Clear:**
 - Set up of Bond CCP clearing system changes in CTS and perform initial internal tests.
 - Distribute technical specifications (APIs, message formats) to participants.
 - Coordinate integration testing with Strate.
- **Strate (CSD):**
 - Update CSD systems to accept settlement instructions from the CCP.
 - Test and validate SWIFT message formats and settlement flows with JSE Clear.
 - Support CSDPs during early settlement tests.
- **Software Providers:**
 - Maintain ongoing communication with clients to ensure delivery timelines are tracked and met.
 - Develop and deliver all system updates needed for Bond CCP (for trading platforms, clearing solutions & back-office systems etc.).
 - Complete and pass conformance testing in the CTS environment to ensure compatibility.
 - Deliver updated system/software to clients.
 - Provide documentation and guidance to clients on new system features or configuration changes.
 - Promptly address any issues identified.
- **CSD Participants:**
 - Adjust internal systems (if required) to accommodate updated fields (e.g., JSE Clear's Business Partner Identification Number).
 - Participate in early CCP settlement tests by committing and linking trades through back-to-back links.
 - Begin training the operations teams on recognising and handling CCP-cleared transactions (settlement processes remain unchanged).
- **Clearing Members:**
 - Work with software providers to update Clearing system.

- Track SWPs and internal delivery teams' timelines against the agreed delivery plan to ensure delivery timelines are met.
 - Prior to the start of Phase 2 Clearing members should ensure they have access to the CTS environment. To verify or request access, please contact our CSC team at CustomerSupport@jse.co.za
 - Deploy Bond CCP software updates in the test environment.
 - Review JSE Clear's specifications and update internal workflows (risk management, settlement, and reporting) to align with CCP processes.
 - Train relevant staff on anticipated changes (e.g. settlement management, end-of-day process, margin collection, reports etc.).
- **Trading Members: Primary Dealers (Cleared trades: ETP and Reported Trades):**
 - Work with software providers to update trading systems (e.g., Nutron API & own software upgrades where applicable).
 - Prior to the start of Phase 2 Trading members should ensure they have access to CTS. To verify or request access, please contact our CSC team at CustomerSupport@jse.co.za.
 - Prepare relevant test cases.
 - Deploy Bond CCP system or software updates in the test environment.
 - The updated Nutron front-end version is available for download, PDs using the front-end may commence early testing.
- **Bond members trading Classic Repo and/or Triparty repo:**
 - Non-mandatory testing for members using this functionality. Work with software providers and/or internal delivery teams to update trading systems (e.g. Nutron API & own software upgrades where applicable).
- **Cash Bond Market Members (Reported Trades):**
 - Work with software providers to update trading systems (e.g., Nutron API & own software upgrades where applicable).
 - Prior to the start of Phase 2 Trading members should ensure they have access to CTS. To verify or request access, please contact our CSC team at CustomerSupport@jse.co.za.
 - Prepare relevant test cases.
 - Deploy Bond CCP system or software updates in the test environment.
 - The updated Nutron front-end version is available for download, PDs using the front-end may commence early testing.
- **Interest Rate Derivative Members:**

- Work with software providers to update trading systems (e.g., Nutron API & own software upgrades where applicable) Prior to the start of Phase 2 Trading members should ensure they have access to CTS. To verify or request access, please contact our CSC team at CustomerSupport@jse.co.za.
 - Prepare relevant test cases.
 - Deploy Bond CCP system or software updates in the test environment.
 - The updated Nutron front-end version is available for download, PDs using the front-end may commence early testing.
- **Information Subscribers:**
 - Users with direct connections to the Nutron API are required to assess their message usage and update their systems if impacted by the API changes.

2.4. Entry Criteria

- **Customer Test Service (CTS) environment:**
 - The Bond CCP customer test service (CTS) environment is up and running.
- **Technical specs provided:**
 - JSE Clear has delivered detailed specifications, file formats, and testing guidelines to participants; vendors and participant IT teams have had time to review and prepare.
- **Participant access configured:**
 - All software providers should have access to the CTS environment or request access to the CTS environment by contacting our CSC team at CustomerSupport@jse.co.za (test user accounts, network access).
- **Initial data setup:**
 - All software providers to ensure the key reference data (participant codes, accounts, subscription groups) they require for testing the CCP has been configured in CTS contact our CSC team at CustomerSupport@jse.co.za for assistance.

2.5. Exit Criteria

- **Integration verified:**
 - JSE Clear and Strate have successfully tested settlement message integration (no critical interface errors).
- **Vendor readiness:**
 - All Software providers passed conformance tests in CTS.
- **Settlement trials successful:**
 - Early CCP settlement tests with Strate & CSDPs were completed with no major issues (CCP instructions matched and settled as expected via Strate).

- **Issue resolution:**
 - Any critical defects identified in Phase 1 (system or interface issues) have been corrected.
- **Phase 1 sign-off:**
 - JSE Clear confirms Phase 1 objectives are met and formally advises Phase 2 to commence (communicated to all participants).

3. Participant Internal Testing & Parallel Run – Phase 2 (May to July 2026)

3.1. Purpose & Scope

Phase 2 focuses on validating the readiness of clearing members and primary dealers to operate through the CCP, beginning with internal system testing and progressing into a coordinated parallel run that mirrors daily activities, ahead of full end-to-end market testing.

Interest Rate Derivatives and Cash Bond Reported market participants perform regression testing.

- **Internal Testing:**
 - Each participant should begin their internal testing during this phase.
 - Rigorous tests should be performed on their updated systems and procedures (e.g., a Clearing Member tests its internal risk calculations, settlement processing, etc.)
 - Trading members test their trading software or Nutron front-end and any other integrated systems etc. in the CTS test environment.
- **Parallel Run:**
 - JSE Clear & Clearing members conduct coordinated “parallel run” in the parallel environment where normal daily trading and clearing activities are simulated through the CCP, focusing on daily end of day processes and reporting to clients.

3.2. Timeline & Milestones

- **Mid-May 2026:**
 - Clearing Member software deployed in the CTS environment.
- **18 May 2026:**
 - All participants should aim to have the necessary software updates installed; internal testing begins.
- **18 May to 10 July 2026:**
 - Clearing Members and other participants execute their internal test plans in the CTS environment, covering all business processes (trade, margin, status intimations and settlement etc.). Issues are tracked and resolved as they arise.
- **13 July to 24 July 2026:**

- Clearing members participate in parallel testing and engage in a simulation of live operations: clearing through JSE Clear (confirming margin calculations, settlement flows, reports and internal processes).
- **Late July 2026:**
 - Phase 2 assessment – JSE Clear confirms Phase 2 objectives are met and formally authorises Phase 3 to commence (communicated to all participants).

3.3. Participant Responsibilities

- **Clearing Members:**
 - Connect to the customer test service (CTS) for internal systems testing, restore using production data.
 - Run extensive internal tests of all workflows with the CCP and resolve any clearing member specific issues.
 - Connect to the clearing member environment (Parallel) for parallel testing, restore using production data.
 - Participate in the parallel run: simulate end-to-end clearing operations for multiple days, including processing of cleared trades and end of day processing.
 - Finalize and document internal procedures for CCP processes.
- **Trading Members (Primary Dealers):**
 - Execute trades on the ETP market and book cleared trades on the Nutron front-end or Nutron API (if applicable).
 - Confirm all cleared trades are marked for clearing.
 - Confirm ETP trades are received in Nutron front-end or API (if applicable).
 - Verify all functionality works as expected.
 - Ensure all integration points are validated.
 - Work with software providers and/or internal teams to resolve any issues.
 - Execute regression testing for the Cash Bonds Reported and Interest Rate Derivatives markets to confirm no impact.
- **Bond Members Trading Classic Repo and/or Triparty Repo:**
 - This is non-mandatory testing for members engaged in these specific markets.
 - Members to test the functionality and enhancements included in this software release.
 - **Functionality:**
 - Edit Classic Repo Term
 - Edit Classic Repo Rate
 - Bulk Upload for Classic Repo
 - Triparty reporting
 - **Enhancements:**
 - Spot Bonds Pricing Discrepancy on Bulk Allocated Trades Details

- NT Reverse Repo Calculations
 - Master Repo Bulk Uploads Clean Consideration issue
 - Master Repo Clean Price displaying incorrectly on Unconfirmed

- **Cash Bond Market Members (Reported Trades) and Interest Rate Derivative Market Members:**
 - Execute all regression tests, for market participants to ensure all trading, post trade functionality works as expected.

- **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.

- **CSD Participants:**
 - Provide technical and operational support during participants' testing.
 - Monitor internal systems to ensure cleared and non-cleared trades are processed correctly. Ensure back-to-back links are tested as they would be in a live production environment.
 - Ensure no changes to daily operations.

- **Strate:**
 - Provide technical and operational support during participants' testing.
 - Monitor internal systems to ensure cleared and non-cleared trades are processed correctly.

- **Software Providers:**
 - Assist participants in resolving any software problems identified (e.g. system configuration errors, bugs) during internal tests.
 - Release patches or configuration updates between test cycles as needed so that all systems function correctly with the CCP.
 - Ensure that by the end of Phase 2, all participants are running the latest, corrected software versions in preparation for the end-to-end market testing in phase 3.

3.4. Entry Criteria

- **Phase 1 completed:**
 - Successful completion of Phase 1, enabling Phase 2 testing.

- **Systems updated:**
 - All participants have installed the Bond CCP software updates.
- **Participant access configured:**
 - All participants have access to the CTS environment.
 - Clearing members to have access to the parallel environment for parallel testing.
 - Contact our CSC team at CustomerSupport@jse.co.za for assistance.
- **Initial data setup:**
 - All participants key reference data (participant codes, accounts, subscription groups etc.) they require for testing has been configured in CTS contact our CSC team at CustomerSupport@jse.co.za for assistance.

3.5. Exit Criteria

- **Internal tests passed:**
 - Participants completed their internal test scenarios with no critical or high-priority issues outstanding.
- **Parallel run success:**
 - Clearing member parallel run demonstrated that core processes (clearing, margining, settlement) operate correctly without any critical bugs.
- **Phase 2 sign-off:**
 - All Participants are ready to commence end-to-end testing Phase 3.

4. Market End-to-End Testing – Phase 3 (July to October 2026)

4.1. Purpose & Scope

Phase 3 involves all participants to test all end-to-end processes including new CCP functionality where applicable and regression testing for Cash Bonds Reported market & Interest Rate Derivatives. All cycles within this phase are mandatory.

- **Cycle 1:** The first end-to-end cycle is performed with all participants by simulating a series of trading days (cleared and non-cleared).
- **Cycle 2:** The second cycle validate fixes from Cycle 1 and test any remaining scenarios to ensure no unresolved issues.
- **Cycle 3:** By the end of Cycle 3, the market should have full confidence in all changes introduced as part of the Bond CCP project.

4.2. Timeline & Milestones

- **27 July 2026 to 21 August 2026:**

- Cycle 1 commences - JSE Clear initiates the end-to-end testing; daily coordinated test schedules commence.
- All firms conduct daily simulated trading and clearing through the CCP, following scenario scripts. Issues are recorded and reviewed continuously.
- Fix & prepare – JSE Clear and participants correct any deficiencies found in Cycle 1 (e.g., applying software patches or tuning parameters) before starting Cycle 2.
- **26 August 2026 to 23 September 2026:**
 - Cycle 2 – Repeat critical tests and add any extra high-volume or edge-case scenarios to double-check the system.
- **28 September to 16 October 2026:**
 - Cycle 3 – JSE Clear leads a final assessment, confirming that the system and participants are ready for the final phase (go-live preparation).

4.3. Participant Responsibilities

- **Trading Members (Primary Dealers):**
 - Simulate realistic trading patterns on the Bond ETP and Nutron (for reported trades) for all cleared transactions.
 - Ensure each ETP trade is novated through the CCP and are margined at end of day by JSE Clear and their clearing member.
 - Verify that the fees charged have been calculated correctly.
 - Verify reports provided by your Clearing Member.
 - Work with Clearing Members to address any issues e.g. reporting, margin payment/receipt process.
 - Execute regression testing for the Cash Bonds Reported and Interest Rate Derivatives markets to confirm no impact.
- **Bond Members Trading Classic Repo and/or Triparty Repo:**
 - This is non-mandatory testing for members engaged in these specific markets.
 - Members to test the functionality and enhancements included in this software release.
 - **Functionality:**
 - Edit Classic Repo Term.
 - Edit Classic Repo Rate.
 - Bulk Upload for Classic Repo.
 - Triparty reporting.
 - **Enhancements:**
 - Spot Bonds Pricing Discrepancy on Bulk Allocated Trades Details.
 - NT Reverse Repo Calculations.
 - Master Repo Bulk Uploads Clean Consideration issue.

- Master Repo Clean Price displaying incorrectly on Unconfirmed.

- **Cash Bond Market Members (Reported Trades) and Interest Rate Derivative Market Members:**
 - Run regression tests, for market participants to ensure all trading, post trade functionality works as expected.

- **Clearing Members:**
 - Restore environment with production data.
 - Perform full daily clearing operations for the duration of the test cycles:
 - Manage receipt of all cleared bond trades and status intimations.
 - Verify fee calculations.
 - Verify daily margin calculations.
 - Execute the required exception handling processes.
 - Daily reconciliations of internal records with CCP outputs.

- **CSD Participants:**
 - Perform daily operational activities for a CSDP, including the management of back-to-back links.

- **Strate:**
 - Perform daily operational activities for a CSD.

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

- **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.

- **JSE Clear:**
 - By the end of Cycle 3, gather confirmation from participants that they are confident in the system.
 - Prepare for next phase (go-live and cutover activities).

4.4. Entry Criteria

- **Phase 2 sign-off:** Confirmation that Phase 2 was completed successfully and all stakeholders are ready for collective testing.
- **Environment prepared:** The test environment has been refreshed with any necessary updates from Phase 2 and loaded with production-like data (market conditions, positions etc.).
- **Agreed test scenarios:** JSE Clear, in consultation with participants, has defined the scenarios for Cycle 1 and Cycle 2. Support structures are in place, contact our CSC team at CustomerSupport@jse.co.za.

4.5. Exit Criteria

- **Successful end-to-end testing:** All planned scenarios were executed across all cycles. Any issues found in Cycle 1 were fixed and verified in Cycle 2, for final verification in cycle 3.
- **No major issues unresolved:** As Phase 3 ends, there are no critical or high-priority defects left unaddressed. The system is stable and all workflows function as intended.
- **Collective readiness:** JSE Clear and all participants confirm that they are operationally and technically ready to proceed to final go-live preparation.

5. Market Acceptance - Phase 4 & Dress Rehearsals (October to November 2026)

5.1. Purpose & Scope

Phase 4 provides the final confirmation of readiness and prepares all stakeholders for go-live.

- **Market Acceptance Test (MAT):** A
 - A short, focused test cycle in mid-October where all crucial functions are tested one more time by the market.
- **Dress Rehearsals:**
 - Conduct market dress rehearsals to establish connectivity to the JSE production environment.
- **Go-Live:** Upon completing the above successfully and confirmation of readiness from all market participants

5.2. Timeline & Milestones

- **19 October to 20 November 2026:**
 - Market Acceptance Test – The market performs the final subset of tests (regression of critical scenarios).
- **10 October 2026:**
 - Dress Rehearsal 1 – Trading Members must establish a connection to the Nutron trading system and submit a limited number of trades for connectivity confirmation.
 - All other participants that connect to the JSE must establish connection to the JSE.

- **07 November 2026:**
 - Dress Rehearsal 2 – A second dress rehearsal executed to confirm any minor refinements from the first dress rehearsal. A successful dress Rehearsal 2 indicates readiness for go-live.
- **Date TBC Go-Live – November 2026**
 - The Bond CCP is officially launched in production.

5.3. Participant Responsibilities

- **Clearing Members:**
 - Participate in market acceptance testing and ensure that final verification is completed and all critical business processes are working as expected.
 - Execute final system checks.
 - During dress rehearsals, perform connectivity testing (i.e., ensure all production connectivity to JSE Clear is in place).
 - After successful dress rehearsals, submit final readiness sign-off confirming all systems, procedures, and staff are prepared for the CCP go-live.
 - Prepare for go-live coordination and software upgrades in production where applicable.
- **Trading Members (Primary Dealers):**
 - Participate in market acceptance testing and ensure that final verification is completed and all critical business processes are working as expected.
 - During dress rehearsals, confirm that the Nutron trading platform and other systems function normally for cleared trades, non-cleared trades in the Cash Bonds Reported market and trades in the Interest Rate Derivative market.
 - Prepare for go-live coordination and software upgrades in production where applicable.
- **Bond Members Trading Classic Repo and/or Triparty Repo:**
 - This is non-mandatory testing for members engaged in these specific markets. Participate in market acceptance testing and ensure that final verification is completed and all critical business processes are working as expected.
 - During dress rehearsals, confirm that the Nutron trading platform and other systems function normally.
 - Prepare for go-live coordination and software upgrades in production where applicable.
- **Cash Bond Market Members (Reported Trades) and Interest Rate Derivative Market Members:**
 - Participate in market acceptance testing and ensure that final verification is completed and all critical business processes are working as expected.
 - Run final regression tests, to ensure all trading and post trade functionality works as expected.

- During dress rehearsals, confirm that the Nutron trading platform and other systems function normally.
- Prepare for go-live coordination and software upgrades in production where applicable.

- **CSD Participants:**
 - Participate in acceptance testing and ensure that final verification is completed and all critical business processes are working as expected.
 - Provide final assurance to JSE Clear that your processes require no additional changes and that your team is ready for go-live.

- **Strate:**
 - Participate in acceptance testing and ensure that final verification is completed and all critical business processes are working as expected.

- **Software Providers:**
 - Double-check that all participants are running the final production version of your software and that configurations are correct for the production environment.
 - During dress rehearsals, ensure there are no remaining technical issues when transitioning to production mode (for cleared and non-cleared instruments).
 - Have support teams on standby for the go-live weekend and initial trading days. Provide JSE Clear and clients with direct contacts for any urgent software support during the transition.

- **Information Subscribers**
 - Users with direct connections to the Nutron API who are impacted by the API message changes are required to participate in market acceptance testing and ensure that final verification is completed and all critical business processes are working as expected.
 - Users with direct connections to the Nutron API and are not affected by the API changes are required to perform regression testing.
 - During dress rehearsals, confirm connection to the JSE.

- **JSE Clear:**
 - **Monitoring & control:**
 - Closely watch all systems and processes during the first live days: confirm trades are novating in real time, margins and fees are being calculated and called as expected, and settlements are completing on schedule.
 - **Communication:**
 - Keep an open line with participants throughout the go-live preparations including dress rehearsals.

- Provide status updates at key milestones.
- **Post-launch support:**
 - Be available for support during initial production period post go-live, monitor and resolve any issues that may arise.

5.4. Entry Criteria

- **Phase 3 completed:** Phase 3 passed all exit criteria met for phase 4 to proceed.
- **Final go-live plan agreed:** The detailed go-live plan (tasks and timings for each participant and system) is finalized and has been reviewed. Participants have confirmed that their teams will be in place during the dress rehearsals and go-live weekend.
- **Contingencies defined:** Clear go/no-go decision points defined and documented.

5.5. Exit Criteria

- **Final tests results accepted:** The Market Acceptance Test was completed; every critical business function was validated one last time.
- **Rehearsals completed:** At least two full go-live dress rehearsals were executed successfully. The go-live activities were completed, and the dress rehearsals ran without major incidents. Any minor adjustments identified were implemented and re-tested.
- **Final signoffs:** All stakeholders (e.g., Clearing Members, CSDPs, Trading participants etc.) provided a final readiness sign-off. These attest that all testing is done, all necessary internal approvals are in place, and the participant is ready for the launch of bond CCP.
- Bond CCP goes live, marking the successful culmination of the testing program.

Consolidated Summary of Testing Phases

Phase & (Timeline)	Main Participants	Exit Criteria (Summary)
Phase 1 – Technical Integration & Prep (Mar–Jun 2026)	JSE Clear (lead); Strate; Software Providers; CSD Participants; IRD Participants	<ul style="list-style-type: none"> • JSE Clear–Strate link tested successfully • All vendor systems conformed • Early CSDP settlement trials successful • No critical defects remaining
Phase 2 – Internal Testing & Parallel Run (May–Jul 2026)	Clearing Members; Trading Members (Primary Dealers); Custodian Banks; Software Providers; JSE Clear (oversight)	<ul style="list-style-type: none"> • Internal testing completed (no high-severity issues) • Parallel run demonstrates daily CCP operations work for all clearing members • No critical defects remaining
Phase 3 – End-to-End Testing (Aug–Oct 2026)	All Clearing Members & Trading Members; CSDPs; Strate; Software Providers; JSE Clear (coordination)	<ul style="list-style-type: none"> • All test cycles executed; all critical scenarios passed • Issues from Cycle 1 fixed and verified in Cycle 2 and 3 • No critical defects remaining • Phase 3 sign-off (market readiness confirmed)
Phase 4 – Market Acceptance & Rehearsals (Oct–Nov 2026)	JSE Clear ; Strate; All market participants (Clearing & Trading Members, Software Providers)	<ul style="list-style-type: none"> • Final critical tests (MAT) passed (zero errors) • Successful dress rehearsals • All participants submitted final readiness signoffs

6. Test environment connectivity details

- Customer testing services (CTS) details:

IP Address: 196.216.153.101

Ports: 2269

- Clearing Member environment (Parallel) details:

IP Address: 196.216.153.41

Ports: 2269

7. Communication and assistance

If there are any queries or difficulties during each testing phase, please contact our Customer support centre on the following email: customersupport@jse.co.za

8. Appendix

8.1. Test scenarios guidance

Please note not all scenarios may be applicable to your firm, as this will depend on your specific Nutron API usage requirements. Additionally, this list is not comprehensive as you should ensure that your BAU activities are tested, even if they do not appear in the list provided.

Feature	Functionality	Primary Dealer	Clearing Member	Strate		Software Providers	CSDPs
Trade Management	Execute cleared bond trade in Nutron	X				X	
	Execute ETP trade on MTS	X					
	View ETP and cleared bond trade in Nutron	X				X	
	Ensure settlement date does not exceed 12 months from trade date	X				X	
	Ensure repurchase date does not exceed 12 months from trade date	X				X	
	Cleared trades can only be structured, normal or buy sell backs	X				X	
	Process Equal & Opposite trades in Nutron and verify updates	X					
Settlement Management	View eligible instruments in Nutron	X	X			X	
	Receive Status intimations in Nutron API	X	X			X	
	Receive settlement instructions from JSE Clear and accept trades			X			
	Commit to trades & apply back-to-back links						X
	Trade cancellations processed			X			X
	Receive and review reports	X	X				
	Receive and review penalties		X				
	Can cancel a cleared bond reported market trade any time before Settlement date in Nutron	X					
	Cannot cancel a cleared bond reported market trade after 12pm on Settlement date	X					
	Cannot cancel ETP trades on Nutron	X					
	Receive and review uncommit reports	X	X				
End of day	Execute end of day successfully		X				
	Download margin parameters						
	Download PnL vectors		X				
	Calculate margins based on new margin methodology for IRD & cleared bonds		X				
	Download reference data		X				
	Download settlement data		X				
	Download daily account summary data		X				

	Download pricing data		X				
	Download fees data		X				
	Download trades data		X				
	Download position data		X				
Reference data	Instrument data download	X	X				
	Client data download	X	X				
	Member data download	X	X				
Intraday Margin Call	Run intraday margin call and download relevant data		X				

8.2. Regression Scenarios

All participants performing regression testing should ensure that regression testing covers all daily trading and trade management activities applicable to their current workflows. Guidelines to testing are below:

Feature	Functionality	Bonds Trading members	IRD Trading members	Clearing Member	Strate	Software Providers	CSDPs
Trade Management	Bond trade execution	X	X				
	IRD trade execution		X				
	Repo (Buy-sell-backs) execution	X					
	Classic Repo execution	X					
	Test cancellations	X					
	Bond and IRD deal management	X	X	X			
Position Management	Position Management on IRD positions		X	X			

