

NUTRON REPORTING REFORM AND ZARONIA PROJECT

MARKET TESTING INFORMATION

(GUIDELINES, KEY DATES, SIGNOFF)

March 2025

Contents

1.	Introduction	3
1.1	Document Purpose	3
1.2	2. Readership	3
2.	Objectives of Testing	3
3.	Software Providers and Own Solution Developers	4
3.1	Conformance Test	4
4.	Trading Members: Client User Acceptance Testing	4
4.1	Trade Initiation	4
4.2	2. Testing Required	4
4.3	B. Customer Test Environment Times	4
4.4	l. Connectivty Details	5
4.5	5. Test Reference Data	5
4.6	S. Client Codes for testing	5
4.7	Functional Testing Scenarios	6
4.8	0 ,	
4.9	Support and Sign-Off	6
5.	Trading Member: Market Dress Rehearsal	7
5.1	Market Dress Rehearsal Testing	7
5.2	2. Support and Sign off	7
6.	Clearing Members	8
6.1	Clearing Members Environment Testing	8
6.2	? Connectivity Details	8
6.3	B. Test Reference Data	8
6.4	l. Sign off	8
7.	Zaronia	8
Clien	t User Accptance Testing Signoff	9
Mark	cet Dress Rehearsal Signoff	0

1. <u>INTRODUCTION</u>

1.1 Document Purpose

This document is intended to inform market participants of the requirements for Client User Acceptance Testing (UAT) and Market Dress Rehearsal (MDR) for the Bond Repo and ZARONIA Project.

Testing Cycle	Dates
Repo Cycle 1	10 March 2025 – 25 April 2025

Testing Phase	Dates	Market Times
Market Dress Rehearsal 1*	29 March 2025	Time frames to be specified via email/Hotline
Market Dress Rehearsal 2*	12 April 2025	Time frames to be specified via email/Hotline
Go-live Preparation	17 May 2025	Time frames to be specified via email/Hotline

1.2 Readership

The intended audience for this document includes:

Cash Bond and Interest Rate Derivative Trading Members as well as Clearing Members which clear for the
 Interest Rate Derivative markets

2. OBJECTIVES OF TESTING

- The objectives of the Trading Member testing are for the JSE to:
 - Simulate trading
 - o Gauge overall level of readiness across Stakeholders
 - Assist with resolving any critical issues that need to be addressed prior to Go live
 - Build internal and external confidence for Go Live
 - Minimise the risk of unexpected issues for Go Live
 - o Provide Users with an opportunity to test their front-end solutions and related systems.
 - o Prove updated internal JSE application readiness for Go Live



3. SOFTWARE PROVIDERS AND OWN SOLUTION DEVELOPERS

3.1 Conformance Test:

- All impacted Software Providers and Own Solutions Developers to ensure that conformance tests are passed by Friday 14 March 2025.
- The purpose of conformance testing:
 - For Software Providers and Own Solution Developers to make sure their trading software is compatible with the JSE trading system API.

4. TRADING MEMBERS – CLIENT USER ACCEPTANCE TESTING (CLIENT UAT)

4.1 Trade Initiation

• JSE members are provided with the following guideline with respect to member-to-member initiation of Classic and Triparty Repo trades. The collateral giver i.e. the seller of the bond must be the trade initiator. This guideline is currently not system imposed but will be programmed in future releases.

4.2 Testing required:

- Market participants are strongly encouraged to participate in client UAT in the JSE Customer Test Services environment (CTS).
- This environment allows for full end-to-end trading as the environment is integrated with Strate.
- Market participants to ensure all trading, post trade functionality and market data publication works as expected.
- All members will be mandated to participate in Client UAT and provide sign off based on the following.
 - Market participants to ensure sufficient testing is conducted in line with BAU activities.
 - Market participants to perform Regression Testing: Test existing trading functionality:
 - Repo Buy/Sell Backs,
 - Cash bonds trading functionality
 - Interest Rate Derivatives trading functionality
 - Market participants wanting to access the new Classic and Triparty repo functionality need to test this new functionality. (Refer to the section called Functional Testing Scenarios for more details.)
- As testing will be done over a few weeks no large volume of testing to be pushed through.

4.3 Customer Test Environment (CTS) Times

- The CTS environment is available every weekday from 07h00 until 16h30 for clients to perform testing (all trading and deal management activity).
- The JSE will commence with End of Day activities for all markets after 16h30.

4.4 Connectivity Details

- Trading Members and all Software Providers can download the Customer Test Environment (CTS) Nutron
 Version at: Nutron API Files | JSE Client Portal
- Members to contact Customer support for activation to the CTS environment, or where they experience issues connecting to the environment.

The Customer Test Environment (CTS) Nutron connectivity details are as follows:

IP Address: 196.216.153.101 **Ports:** 2269

4.5 Test Reference Data

- The test reference data will be used, using your own member code, as well as Trader ID. The J-Codes will be supplied by the JSE to ensure that there is no reference data issues or set up issues. This will also enable all trades reported to Strate seamlessly. The data has been aligned between JSE and Strate. Customer support can be reached on CustomerSupport@jse.co.za
- Member Client Trades: The JSE has pre-populated client accounts on the Nutron trading system and Strate for testing. Members may use these client accounts to book test trades. Should there be further requirements or queries, please reach out to the Customer Support team.

4.6 Client codes for testing:

- Members will use their own member code to test.
 - Members to check with CSC on trader ID's etc for the CTS environment and ensure its active. Specific
 activation is required for Classic and Triparty Repos IDs for buy-sell-backs will not work.
 - Members to email CSDP's and copy in SAT team for commits. Members to use <u>bonds25@jse.co.za</u> to send correspondence to the JSE in relation to the testing.
 - JSE will provide members with Jcodes linked to the member for testing, this will eliminate any reference date issues.



4.7 Functional Testing Scenarios:

Market participants are recommended to test the following functionality as a guideline:

	Classic Repo*				Triparty Repo
	Closed- Ended	Open-Ended	Evergreen	Collateral Swap	
Initiate a Repo	Х	Х	Х	Х	Х
Accept/Reject/Cancel Repo	Х	Х	Х	Х	Х
Edit: Term	Х	Х	Х	Х	Х
Edit: Rate	Х	Х	Х	Х	Х
Edit: Settlement Value					Х
Substitute Collateral	Х	Х	Х	Х	
Report Interest Payment		Х	Х		
Triparty Termination					Х

^{*}Please note additional features of the Master trade – Fixed and floating rate Repo Rate, Haircut, Collateral Substitution.

(Please note, this is just a guideline as to what test scenarios need to be covered during client UAT)

4.8 CSDP (Central Script Depository Participant) Testing Activity:

CSDP's will be required to:

- Commit to client trades where required without instructions from the client.
- Update holdings etc and commit to all member trades.
- Communicate any issues or request Strate to commit on their behalf.

4.9 Support and sign off

- Any issues encountered must be logged with customer support on 011 520 7777 or customersupport@jse.co.za.
- We kindly ask clients to provide a weekly status update on testing activity to help us assess common issues and anomalies as client UAT progresses.
 - o Sign off via email to be provided upon successful participation in client UAT.
 - Status and final sign off to be sent to: IRC and KCM teams (irc@jse.co.za and keyclients@jse.co.za)



5. TRADING MEMBERS – MARKET DRESS REHEARSAL TESTING (MDR):

5.1 Market Dress Rehearsal Testing:

- Market participants are mandated to successfully test in one of the scheduled MDR's to ensure successful implementation.
- The intended purpose of the MDR's is a connectivity and limited functionality testing.
- Members are required to successfully connect to the new IRD Nutron environment.
- For the functional testing, members are required to book some trades, both new and current (regression) functionality either against other members or against clients.
- Strate and CSDP's will not be participating in either of the Market Dress Rehearsal testing.
- Members to note that the orders will remain in Unconfirmed queues. This will be the expected behaviour for this test.
- We will not issue results post regression testing and MDR's but rely on your teams to ensure adequate testing and sign-off as an indication of a successful test.

5.2 Support and sign off

- Any issues encountered must be logged with customer support on 011 520 7777 or customersupport@jse.co.za.
- Sign off via email to be provided upon successful participation in one MDR, to be sent to irc@jse.co.za or keyclients@jse.co.za

6. **CLEARING MEMBERS:**

6.1 Clearing Member Environment Testing

- The Clearing Member environment is available from 09h00 until 16h30 for clients to perform testing (all trading and deal management activity).
- The JSE will commence with End of Day activities for all markets after 16h30.
- Clearing Members will receive a detailed test plan to assist with BAU test cases.

6.2 Connectivity Details

Clearing Members can download the Updated Nutron Version at: Nutron API Files | JSE Client Portal

The Clearing Member environment connectivity details are as follows:

IP Address: 196.216.153.41 **Ports:** 2269

6.3 Test Reference Data

• The test reference data will be as per current production data. A restore will be done in the environment on Monday 10 March 2025 using production data as at end of day on 07 March 2025. Please could we request that all clearing members complete the same restore/clean-up of their environments to ensure that balancing can take place during the test cycle.

6.4 Sign off

• Clearing Member sign off can be provided to ClearOps@jse.co.za

7. ZARONIA

• No specific test scenarios will be required, as testing for the ZARONIA project will be covered by the regression testing for the Bond Repo Project.



CLIENT USER ACCEPTANCE TESTING SIGN OFF

To be returned to the JSE on completion of testing	
Member Firm/Client Name:	Date:
Market Testing Sign Off Checklist completed by:	
Name:	
Position:	
Company code /Member ID:	
Signature	
I hereby declare that all information contained here-in is of my organisation.	s an accurate reflection of the test conditions executed on behalf
Signed by Business Representative (e.g., Head of Trad	ing):
Name:	_
Signature	_
Signed by IT representative:	
Name:	_
Signature	_
General Comments:	



MARKET DRESS REHEARSAL SIGNOFF To be returned to the JSE on completion of testing Member Firm/Client Name: ______ Date: _____ Market Testing Sign Off Checklist completed by: Name: Position: Company code / Member ID: Signature I hereby declare that all information contained here-in is an accurate reflection of the test conditions executed on behalf of my organisation. Signed by Business Representative (e.g., Head of Trading): Name: Signature Signed by IT representative: Name: Signature General Comments: