JSE Derivatives System Replacement Market Dress Rehearsal Pack

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1. Introduction

1.1. Document Purpose

This document is intended to outline the objectives, schedule and data guidelines for the JSE Derivatives System Technology upgrade dress rehearsals and go live.

Dress Rehearsal 1	18 February 2012	Mandatory Business testing - Equity Derivatives - Commodity Derivatives	08h30 – 12h40
Dress Rehearsal 2	25 February 2012	Mandatory Business testing - Equity Derivatives - Commodity Derivatives	08h30 – 12h40
		- Interest Rate Market - Currency Derivatives	09h00 – 11h00

1.2. Readership

The intended audience for this document includes:

- JSE Equity, Commodity Derivatives, Interest Rate and Currency markets participants (trading and clearing members)
- JSE Equity, Commodity Derivatives, Interest Rate and Currency markets API Software Providers
- JSE Equity, Commodity Derivatives, Interest Rate and Currency markets Information subscribers

Please note that Interest Rate and Currency Market participants need to partake on Dress Rehearsal 2 (25 February 2012) to prove connectivity to the new proxy IP layer.

2. Objectives of the Market Dress Rehearsal

The objectives of the JSE Dress Rehearsal are to:

- Simulate selected trading on the new Derivatives Markets
- · Gauge overall level of readiness across all Stakeholders
- · Identify 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 on Go Live day
- Provide Users with an opportunity to test their front-end solutions and related systems on the production environment
- Provide API developers with opportunity to prove systems in a production environment
- Prove existing internal JSE application readiness for Go Live
- Prove EOD processes and other after market activities

Note: Apart from a scheduled period of volume testing (See Section 6 - *Functional Testing Schedule*) the overall objective of the JSE Derivative Market Dress Rehearsals is **NOT** that of a stress test.

3. Market Dress Rehearsal Schedule and Tracking

3.1. Market Dress Rehearsal Schedule

The Market Dress Rehearsals for the Equity and Commodity Derivatives go live will take place on 2 separate weekends per market. This is in addition to all user firms own testing and connectivity preparations to the new system prior to the Dress Rehearsals and Go-Live.

Saturday schedule

Α	JSE System start up	07h30 - 08h00
В	System Online (Users Log in)	08h30 - 09h00
С	Trading	
	 Commodity Derivatives and Global Market 	09h00 - 10h50
	Equity Derivatives	09h00 – 11h00
	Admin period for all markets	11h00 – 11h10
D	End of Day activities	11h10 – 12h40

Please Note:

• The JSE will available for support throughout the test

3.2. Dress Rehearsal Tracking

The JSE Derivative Market Dress Rehearsal *Detailed Checklist* (Section 7 of this document) will be used as a measure of success of a participant in the JSE Derivative Market Dress Rehearsal. A single checklist per participant Firm must be completed by a nominated representative and must be signed off by both the Head of Trading and an IT representative.

The completed *Detailed Checklist* must be submitted via email or can be faxed to the JSE by the latest 10h00, the Monday post the Dress Rehearsal Weekend. The contact details are provided below:

E-mail: <u>Derivative_Info@jse.co.za</u>

Fax: +27 11 5208592

3.3. Pre Requisites

The following have been outlined as pre requisites for the JSE Derivative Market Dress Rehearsal:

- Network connection to the new application has been requested and tested
- Latest NUTRON front version must be configured (specifically for production environment)
 and ready to trade or receive data
- API software providers and Information Subscribers must have passed conformance
- Key responsible person identified and communicated to the JSE prior to test

If Pre requisites are not met, the user may not participate in the Dress Rehearsal.

3.3. Success / Pass Criteria

The following have been outlined as success / pass criteria for the JSE Derivative Market Dress Rehearsal:

- User ability to connect and trade
- 100% interactive participation throughout the test period Number of traders logged on
- Adherence to the test schedule and conditions
- Adherence to realistic order details and prices
- Adherence to normal trading and volume activity Order and trade data generated per trader except for volume test
- Completed and signed test checklists / results returned to the JSE
- Completed and signed declaration that functionality and data integrity was intact
- · All problems are logged
- No excessive re-requests of data during the tests
- Limited system errors generated by users in system logs

4. Participant Responsibilities and Data Guidelines

4.1. Participant Responsibilities

The following list details the responsibilities of all JSE Derivative Market Dress Rehearsal participants:

- Participants are responsible for all of their own environment preparations, connectivity and reference data download
- All users to log on and participate in the test
- Ensure that all fields are displayed correctly and as expected
- Ensure that all fields are enterable as expected
- · Check that invalid field entries are not allowed
- Check that you have access to all functionality that you expect and not more or less
- · Does all this functionality operate as expected
- Regular checkpoints will be communicated throughout the test by the JSE. Any participant
 falling behind the schedule must communicate this to the JSE as soon as possible. Likewise
 if the schedule is required to change, this will also be communicated to the market.
- All Software bugs may be logged and sent to the JSE. Any other issue encountered during Dress Rehearsal must be logged with JSE Client Services (011-520 7777)

4.2. Data Guidelines

The following are key data guidelines:

- Valid user codes and passwords must be used for all application access
- Realistic prices and volumes must be entered
- Data will be converted from production for the Dress Rehearsals and should therefore be correct data

4.2. Communication

The JSE will communicate with all testers using the following method, if required:

- A message via the front end
- Users may log any issues experienced with the JSE's Client Services team (011-520 7777)

The JSE will communicate progress, issues and status of the tests using the above communication mechanisms.

Market Dress Rehearsal Functional Testing Checklist

07h30

Check Autoquote engine startup

Saturday: Full participation mandatory Note: The shaded steps are performed by the JSE and have been included for a level of functional understanding. Reference numbers highlighted in yellow indicates technical actions and in blue indicates business steps. CM - Clearing Members APD - Commodity Members EDM - EDM Members CM - Clearing Members API - Application Vendors systems and Market Makers IS - Information Subscribers Completed (Y/N) Successful (Y/N) Applicable To Ref **Action / Event Expected Result** Comments **A1** Market started JSE File preparation Saturday: rket Startup Check market times

S Mar			Check Single Stock Future mappings				
Check	Point 1						
Saturday: User Login	08h30 - 08h50	B1	All API users, JSE Font End users and Information Users login	Users logged into market	CM APD EDM IS API		

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Saturday: Market Download & Subscription Period		B2	All users subscribe to required messages. Users subscribe to required contracts - JSE Front End users setup their Trading Screens. - API users send messages to request contracts. API users download required files (users of JSE FE receive these automatically on log in)	Users have subscribed to required messages JSE Front End Users' trading screens are setup. API Users have subscribed to required contracts API users have downloaded required files.	CM APD EDM IS API			
Check	Point 2							
ay: Period	9h00	C1	APD Market Users enter orders during the open order period EDM MARKET	Orders appear in users' Active Orders view, but not on screen Best bid and ask of	CM APD IS API CM			
Saturday: Open Order Period	00460 — 05480		Users enter orders during the Auction period (starts when 5min to Market Open announcement is displayed, 08h50 – 09h00)	orders entered during the Auction Period are matched and Opening Price calculated	EDM API			
Check	Point 3							
9am to								
		TE an	d Currency Derivativ	es Market Connectivity T	esting to	new IP	addre	sses - all users
				nnectivity to address 196				
Saturday: Continuous Trading	10h50 10h50 EDM – 09h00 –	D1	Insert Orders (SSF's, Index Futures, Agricultural Futures, Options, Can-Do Options, Splits, Spreads etc)	Orders inserted	CM APD EDM API			

D2	Delete & Suspend	Orders	CM		
	orders	suspended/deleted	APD		
			EDM		
			API		
D3	Resubmit Orders	Orders resubmitted	CM		
			APD		
			EDM		
			API		
D4	Reduce Orders	Orders reduced	CM		
			APD		
			EDM		
			API		
D5	Edit Orders	Orders edited	CM		
	Lait Olders	Orders caned	APD		
			EDM		
			API		
D6	Cancel Orders	Orders cancelled	CM		
00	Cancel Orders	Orders cancelled	APD		
			EDM		
D7	Information	Screen / Price Updates	IS		
	Subscribers listen	received.			
	to Screen / Price				
	Updates.				
D7	Fotos Donos t Ook	Daniel Only and an	014		
D7	Enter Report Only	Report Only orders	CM		
	Trades	entered	APD		
			EDM		
D8	Accept Report	Report Only orders	CM		
	Only trades	accepted	APD		
			EDM		
D9	Option Exercise	Options exercised	CM		
<u> </u>	Option Exercise	Options exercised	APD		
			EDM		
D10	Enter Tri-partite	Tri-partite Deal entered	EDM CM		
D10	Enter Tri-partite Deal	Tri-partite Deal entered	EDM CM APD		
D10		Tri-partite Deal entered	EDM CM		
	Deal	·	EDM CM APD EDM		
	Deal Roll position	Position closed out and	EDM CM APD EDM CM		
	Deal	Position closed out and booked into another	EDM CM APD EDM CM APD		
D11	Roll position forward	Position closed out and booked into another position	EDM CM APD EDM CM APD EDM EDM		
	Deal Roll position	Position closed out and booked into another	EDM CM APD EDM CM APD EDM CM APD EDM CM		
D11	Roll position forward	Position closed out and booked into another position	EDM CM APD EDM CM APD EDM CM APD EDM CM APD		
D11	Roll position forward	Position closed out and booked into another position	EDM CM APD EDM CM APD EDM CM APD EDM CM		
D11	Roll position forward Load Clients	Position closed out and booked into another position Clients loaded	EDM CM APD EDM CM APD EDM CM APD EDM CM APD EDM		
D11	Roll position forward	Position closed out and booked into another position	EDM CM APD EDM		
D11	Roll position forward Load Clients	Position closed out and booked into another position Clients loaded	EDM CM APD EDM		
D11 D12	Roll position forward Load Clients Edit Clients	Position closed out and booked into another position Clients loaded Clients details updated	EDM CM APD EDM		
D11	Roll position forward Load Clients	Position closed out and booked into another position Clients loaded	EDM CM APD EDM		
D11 D12	Roll position forward Load Clients Edit Clients	Position closed out and booked into another position Clients loaded Clients details updated	EDM CM APD EDM		
D11 D12	Roll position forward Load Clients Edit Clients	Position closed out and booked into another position Clients loaded Clients details updated	EDM CM APD EDM		
D11 D12 D13	Roll position forward Load Clients Edit Clients Assign trades	Position closed out and booked into another position Clients loaded Clients details updated Trades assigned	EDM CM APD EDM		
D11 D12	Roll position forward Load Clients Edit Clients	Position closed out and booked into another position Clients loaded Clients details updated	EDM CM APD EDM		
D11 D12 D13	Roll position forward Load Clients Edit Clients Assign trades	Position closed out and booked into another position Clients loaded Clients details updated Trades assigned	EDM CM APD EDM		

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		D16	Cumulate Trades	Trades cumulated	CM APD EDM		
		D17	Silo Receipts & Physical Deliveries	Silo Certificates and Delivery Notices entered	CM APD		
Chack	Point 4						
Oncor	. Oille 4	F2	Report Only trades edited	Report Only trades edited	CM APD EDM		
		F3	Accepting/rejecting report only trades	Report Only trades accepted/rejected	CM APD EDM		
	0	F4	Assign (allocate) trades	Trades assigned	CM APD EDM		
Saturday: Admin Period	APD - 10h50 - 11h00 EDM - 11h00 - 11h10	F5	Split Trades	Trades split	CM APD EDM		
Satur Admin	D - 10h5 M - 11h0	F6	Cumulate Trades	Trades cumulated	CM APD EDM		
	A II	F7	Silo Receipts & Physical Deliveries	Silo Certificates and Delivery Notices entered	CM APD		
		F8	Adding a New Client	New Client is added	CM APD EDM		
		F8	Adding a New Client	New Client is added	CM APD EDM		
Check	Point 5						
Saturday: Market Closed	APD - 11h00 EDM - 11h10						
	I		l .		ı	I	l .

Check	Point 6	ı			ı	ı ı	1	
Saturday: Run EOD	APD - 11h00- 11h30 EDM - 11h10 - 11h40							
Check	Point 7							
		12	Make Daily Account Summary available for download	Daily Account Summary available for download	JSE			
Saturday: Clearing Member Balancing	APD - 11h30-12h30 EDM - 11h40 - 12h40	13	Clearing Members advised by Exchange that MTM file and Daily Account Summary can be downloaded	Clearing members notified	JSE			
S Clearing I		14	Clearing Members download MTM file & Daily Account Summary	MTM and Daily Account Summary downloaded	CM IS			
		15	Clearing Members run their EOD processes	Clearing Members processes run	СМ			
		I6	Clearing Members balance to Exchange	Clearing Members balanced to Exchange	CM IS			
		Re f#	Action / Event	Expected Result	Ap pli ca	BER ER	Comments	

Trading Phase		Ref#	Action / Event	Expected Result	Applicable To	Completed (Y/N)	Successful (Y/N)	Comments	
Note: T	Saturday: Rollback to environments - Full TECHNICAL participation mandatory Note: This is to restore Derivative replacement systems to their state as at end of Friday, so that production parallel can continue on								
		L2	Clearing Members to Roll Back their systems to state as at Friday	Successful Rollback of systems	СМ				
Saturday Roll Back	APD and EDIM 12h40								

Market Dress Rehearsal Detailed Checklist To be returned to the JSE as per instructions in Section 3.2. Member Firm Name:_____ Date:_____ Market Dress Rehearsal Detailed Check-list 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 Head of Trading: Name: Signature Signed by IT representative: Name: Signature General Comments: ___