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

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 schedules

Α	JSE System start up	07h30 – 08h00	
В	System Online (Users Log in)	08h30 - 09h00	
С	Trading • Equity, Commodity Derivatives and Global Market	09h00 – 10h30	
D	End of Day activities	10h30 – 11h30	

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 electronically <u>and</u> 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>

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.

5. Market Dress Rehearsal Functional Testing Checklist

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 Phase Ref **Action / Event Expected Result** Comments A1 JSE File preparation Market started Saturday: Market Startup Check market times 07h30 Check Autoquote engine startup Check Single Stock Future mappings **Check Point 1** All API users, JSE Users logged into СМ Saturday: User Login Font End users market APD and Information **EDM** Users login IS API All users subscribe Users have subscribed СМ to required to required messages APD messages. **EDM** JSE Front End Users' IS Market Download & Subscription Period Users subscribe to trading screens are API required contracts setup. 08h30 - 08h50 JSE Front End users API Users have setup their subscribed to required Trading contracts Screens. **B2** API users API users have send downloaded required messages to files. request contracts. API users download required files (users of JSE FE receive these automatically on log in) **Check Point 2**

			T		T			
eriod	00	C1	APD Market Users enter orders during the open order period	Orders appear in users' Active Orders view, but not on screen	CM APD IS API			
Saturday: Open Order Period	08h50 - 09h00	C2	EDM MARKET Users enter orders during the Auction period (starts when 5min to Market Open announcement is displayed, 08h50 – 09h00)	Best bid and ask of orders entered during the Auction Period are matched and Opening Price calculated	CM EDM API			
Check	Point 3							
		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	Orders suspended/deleted	CM APD EDM API			
	30	D3	Resubmit Orders	Orders resubmitted	CM APD EDM API			
Saturday: Continuous Trading	09h00- 10h30 09h00 - 10h30	D4	Reduce Orders	Orders reduced	CM APD EDM API			
Sat	APD - 09 EDM - 09	D5	Edit Orders	Orders edited	CM APD EDM API			
		D6	Cancel Orders	Orders cancelled	CM APD EDM			
			D7	Information Subscribers listen to Screen / Price Updates.	Screen / Price Updates received.	IS		
		D7	Enter Report Only Trades	Report Only orders entered	CM APD EDM			
		D8	Accept Report Only trades	Report Only orders accepted	CM APD EDM			

	1	DO	Ontion Evension	Ontions aversiand	CM	1	
		D9	Option Exercise	Options exercised	CM APD EDM		
		D10	Enter Tri-partite Deal	Tri-partite Deal entered	CM APD EDM		
		D11	Roll position forward	Position closed out and booked into another position	CM APD EDM		
		D12	Load Clients	Clients loaded	CM APD EDM		
		D13	Edit Clients	Clients details updated	CM APD EDM		
		D14	Assign trades	Trades assigned	CM APD EDM		
		D15	Div Trades	Trades are Divided	CM APD EDM		
		D16	Cumulate Trades	Trades cumulated	CM APD EDM		
		D17	Silo Receipts & Physical Deliveries	Silo Certificates and Delivery Notices entered	CM APD		
		D18	Check Delayed Data Feed on web	Delayed feed available on web	CM APD EDM IS		
Check	Point 4						
CHOOK	. Oint 4	F1	Entry of Report only trades (No On Screen Trading Allowed)	Report Only trades entered	CM APD EDM		
po	10h40 - 10h40	F2	Report Only trades edited	Report Only trades edited	CM APD EDM		
Saturday: Admin Period	- 10h30 – 10h40 – 10h30 – 10h40	F3	Accepting/rejecting report only trades	Report Only trades accepted/rejected	CM APD EDM		
<	APD - 1 EDM	F4	Assign (allocate) trades	Trades assigned	CM APD EDM		
		F5	Split Trades	Trades split	CM APD EDM		

		F6	Cumulate Trades	Trades cumulated	CM APD EDM		
		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		
Check	Point 5						
Saturday: Market Closed	APD - 10h40 EDM - 10h40	G1	Market Closes	Market Closed – Market in download only			
Check	Point 6						
Saturday: Run EOD	APD - 10h40 – 11h15	Н1	Exchange performs EOD run (MTM & Margining)	EOD run successfully	JSE		
Check	Point 7						
Saturday: Clearing Member Balancing	APD - 11h15-12h00	11	Make MTM File available for download	MTM File available for download (by all participants)	JSE		
Satu aring Men	APD - 11I	I2	Make Daily Account Summary available for download	Daily Account Summary available for download	JSE		
Cle		13	Clearing Members advised by Exchange that MTM file and Daily Account Summary can be downloaded	Clearing members notified	JSE		

		<u>14</u>	Clearing Members download MTM file & Daily Account Summary	MTM and Daily Account Summary downloaded	CM IS			
		<mark>15</mark>	Clearing Members run their EOD processes	Clearing Members processes run	СМ			
		<mark>16</mark>	Clearing Members balance to Exchange	Clearing Members balanced to Exchange	CM IS			
Trading Phase		Ref#			Applicable To	Completed (Y/N)	Successful (Y/N)	
Trac			Action / Event	Expected Result	Ā	ပိ	Suc	Comments
Saturda	This is to	resto	environments - Full TE	Expected Result ECHNICAL participation man	datory			
Saturda Note: T	This is to	resto	environments - Full TE	ECHNICAL participation man	datory			

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: ___