

Integrated Trading & Clearing (ITaC)

Dress Rehearsal Briefing

1 November 2017



Agenda

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- High Level Summary of changes
- ITaC project timeline & key dates
- Market facing dress rehearsals for November 2017
- Planned Conceptual Training
- Questions
- Additional information included
 - Annexure A ITaC Instrument Type Changes
 - Annexure B Dress Rehearsals Trading
 - Annexure C Dress Rehearsals Post-trade



A note of thanks...



- We would like to thank the software providers and own solution developers for their engagement and participation thus far and for meeting the milestones set!!
- Thank you to all clients for submitting their enablement requests on time in preparation for the 11 Nov 2017 dress rehearsal – a tremendous effort by all!



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ITaC Trading Changes

Highlighting key changes and new services

Trade Reporting - Specific Trade Sub-types

More specific reporting functionality, special trade types not only one generic reported trade. Can identify activity better.

🞾rder Types and Time 💄 **Enforcers**

More options for order types and ability to allow orders to live for more than one day

On Book Trading

Enhancement of Stop and Stop Limit orders and the TIF (Time in Force) additions allowing more flexibility

Trading Member Clearing Member

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Market Data Subscriber

** Post ITaC go live

Option Instruments

Dynamic Intraday auto-generation of option Strikes to follow Market Movements.

Logging on

Dealers log on to in-house front ends and connectivity is established between exchange and the firm.

Volatility Auctions

Dynamic and Static circuit breakers trigger Volatility Auctions. Price-band Limits no longer apply.

ITaC Trading Key Changes

Front-ends

RFOs **

Request For Quotes

introduced to increase

liquidity and matching

potential.

JSE will no longer provide trading and deal mgmt frontends (Nutron)



Pause Trading Session

Ability to Pause the Market allowing Order Management without matching occurring. Improved functionality from pure Halt status.











ITaC Trading Changes

Highlighting key changes and new services

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Trading Member

Clearing Member

Market Data Subscriber

Intra-Day Trading XSession Updates

Ability to change sessions intraday without needing to Halt Market. Potential for intraday Auctions exists.

Quotes Easier Market-Making

functionality.

Reference data Now available via csv files

on the JSE IDP site.

Latency

Improved Consistent Latency (for low latency trading).

SE Services Agreement (JSA)

All market participants to sign JSA prior to using JSE **Customer Test Service (CTS)** or production services

ITaC Trading Key Changes

Trade Cancellation and Corrections

Cancellation, Trade Bust and **Price Adjust levels**

Drop Copy

Real-time, directly from exchange of all order statuses. For both Clearing and Trading Members.



Post Trade

Real-time, directly from exchange of all trade statuses. For both Clearing and Trading Members.



Removed

New

Modified



ITaC Live Market Data Changes

Overview

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JSE Data Agreement (JDA)

Data agreement changes will be applicable (schedules)

Indicative Auction Information

Real time update on Uncrossing Price and Volume

Multicast Protocol

Market data now available via Multicast Protocol versus point to point dissemination.

Statistics

More data available through Extended Statistics message (both L1 and L2)



Changed

Discontinued



Full Market Depth

Full depth order book feed available (Also referred to as L2 feed)

Data
Key Changes



Top of Order Book

Best Bid and Ask feed available.
(Also referred to as L1 feed)



Market Data to the London POP

Replace with new EDM feeds Introduce new FX feeds

(Commodities Derivatives data feed remains unchanged)



Instrument Identification

Introduction of Instrument ID matching. Further details of Instrument contained in Start of Day file on IDP FTP server



Provision of Non-Live Data

No provision of Non-Live Data via Live Data Feeds





Market Data via RTC

A subset of Public Market Data will be made available via Real Time Clearing (RTC) Feed to support operational needs of Clearing Members.

ITaC Live Market Data Changes

Detail



Changes to Live Data

- JSE Data Agreement to be signed
- Two types of MITCH based Live Data Feeds per market
- Full Depth (L2) Data Feed Throttled and Unthrottled
- Top (L1) of Book Data Feed
- Both feed types will include Extended Statistics
- The Extended Statistics message also includes three key Derivatives data values (Open Interest, Notional Exposure and Notional Delta Exposure)
- Non-Live Data will not be made available via the Live Data feeds
- Subset of Public Market Data made available via RTC Feed is to support the operational functioning of Clearing Members. Any other use of this Public Market Data will be need to be licensed separately. Refer to the Volume PTO2 – Post-trade EMAPI Clearing for further information

Changes to PoP Service

- Replacement of the current EDM Data feed (JSE Derivatives Market format) with the two new MITCH EDM Data feeds
- Introduction of the two new MITCH FX Data Feeds.
- All new data feeds will be Multicast MITCH format.
- The existing Commodities data feed will continue unchanged.



ITaC Non-Live Market Data Changes

Overview

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JSE Data Agreement (JDA)

Data agreement changes will be applicable (schedules/new agreement)

Web Reports format and structure

Web Reports will be exact copies of corresponding Data Records

Provision of Reports on JSE Website



A subset of the Data Records will be made available later in the night as PDF based Web Reports for General Public Viewing

Web Reports and Data Products Integration

Web Reports and Data Records integrated to form new sets of Data Records and Web Reports

ITaC Non-Live Market Data Key Changes



Changes to EDM Data Records



New and changed Data Records Some Data Records discontinued



New FX Data Records

FX data will be provided in a new separate set of Data Records



No conformance of Data Records will be required. It is up to Subscribers to be ready for go live



IRD Data Records continues

Interest Rate Derivatives Data Records will continue to be provided but with FX data removed

New Changed

Discontinued





ITaC Non-Live Market Data Changes

Detail



Changes to Data Records

- JSE Data Agreement to be signed
- FX data will move from being provided via IRC Data Records to new set of FX Data Records
- IR Derivatives data will continue to be provided via existing IRD Data Records
- 16 EDM Data Records will be made available
- 2 current EDM Data Records will be discontinued
- 13 FX Data Records will be made available

Changes to Web Reports

- A set of Web Reports will continue to be published on JSE website for General Public viewing
- Web reports will be provided in PDF form and most will be provided at midnight
- Web Reports will have same fields and same fields sequence as corresponding Data Records
- 10 EDM Web reports will be provided
- 5 current EDM Web Reports will be discontinued
- 9 FX Web Reports will be provided
- 5 current FX Web Reports will be discontinued



ITaC Non-Live Market Data Changes

Data record commercials



EOD Data product fees:	ZAR (Excl. VAT)	USD
End of Day Products - <u>Equity Derivatives</u> - Data Records:		
Category: Rates (RED01; RED02; RED03)	-	-
Category: Risk (ADD01; IED01)	-	-
Category: Statistics (DED01; DED02; DED03; DED04; SED02; OED02; PED01; AED01) Category: Valuations (MED01; MED02; CED01; IED02; LED01; LED01)	Fees ap	plicable
End of Day Products - <u>Currency Derivatives</u> - Data Records:		
Category: Rates (RCD01; RCD02; RCD03)	-	-
Category: Risk (ACD01; ICD01)	-	-
Category: Statistics (DCD01; SCD02; OCD02; MCD02; MCD04; MCD05) Category: Valuations (MCD01; MCD02; CCD01; CCD02; CCD03)	Fees applicable	



ITaC Systems

Post-trade perspective JS≣ Clearing Member **Trading Settlement** CSDP, Member **Bank Front-end** Client **Authorised** Front-end/s **FX Dealer Trading API RTC EMAPI JSE IDP SCMS Front-end BDA Strate Collateral Real Time Clearing (RTC) Trading SWIFT** Management **Deal Management & Clearing System** G/W System (SCMS) **JSE Internal Systems** 12

ITaC Clearing Changes

Summary of key changes and new services

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Trade Entry

Non-validation of accounts on trading system. Price bands.

JSE Services Agreement (JSA)

All market participants to sign JSA

prior to using JSE testing (CTS) or

production services



Pre-Trade Risk

Changes to pre-trade controls

Intra-day Risk Monitoring

New real-time service for monitoring and setting exposure limits



Margining Methodology

Minor changes to current JSPAN methodology. Intentions to move to HistVaR methodology in future.



New

Modified

Removed

Instruments codes/fields. Dividend neutral.

Deal Management

Reference Data

Members Codes.

Sub accounts.

New commissions functionality to replace "Take-a-Turn"

ITaC Clearing Key Changes

Front-ends

JSE no longer to provide vanilla trading and deal management front-ends



Data Agreements

Market participants to sign data agreements



Global Markets

Remain on Nutron during transition (move to CMD)



Single EoD run across all markets. Two-step CM balancing process

** Test as part of ITaC but implement post bedding down period after go live. FX pending legal approval



Securities and FX Collateral **

New service that allows trading members and clients to pledge securities and FX as collateral



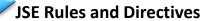
BDA Integration

To include information of pledged securities collateral



Interfaces, connectivity and bandwidth

New technical interfaces. Connectivity to JSE DR site required.



Changes to JSE derivatives rules and directives in relation to new and removed services





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ITaC Project Timeline and Key Dates

Leanne Parsons



Project ITaC Count Down

As at 1 November 2017



7 business days to 11 Nov 2017 1st market facing dress rehearsal

74 business days
to Go Live
19 Feb 2018
Just over 15 weeks!



JSE Services Agreement (JSA) & Trader Audit status



JSA Status

- All JSE Trading and Clearing Members that participate in the Equity Derivatives and Currency Derivatives Markets as well as real-time Information Subscribers
- All JSA's for existing (Equity Market clients) and new clients have been issued to clients
- Targeting end December 2017 to have all JSA's signed
- JSA Workshop held 2 October 2017 assisted in giving clarity and initiated some good engagements. Any additional queries to be sent to JSA@jse.co.za

•	Total JSA's distributed	148
•	Issued Percentage complete	100%
•	JSA's returned by clients	33%

Member Alpha code and Trader and Contact Audit

•	Total Members contacted	150
•	Total Responses received	149
•	Winding down	5
•	Updated on CRM	140
•	ITM Alpha Code Confirmed (EDM & IRC)	90 (active)

Percentage Overall Complete
 90%





Milestones completed successfully

Date	Milestone
22 Sept 2017	Conformance cut-off date

First Software Provider /Own solution developer Dress Rehearsal		
21 Sept 2017	Enablement requests for 7 Oct dress rehearsal	
28 Sept 2017	Live Connectivity (LCON) tests to be completed	
7 Oct 2017	First Software Provider/Own Solution developer dress rehearsal	

Second Software Provider /Own solution developer Dress Rehearsal		
12 Oct 2017	Enablement requests for 21 Oct dress rehearsal	
19 Oct 2017	Live Connectivity (LCON) tests to be completed	
21 Oct 2017	Second Software Provider/Own Solution developer dress rehearsal	





Date	Milestone	
Voluntary Clearing Member Testing (VCMT)		
3 Nov 2017	As requested by clients - extended time to 3 Nov 2017	

Mandatory Clearing Member Testing (MCMT)		
13 Nov – 15 Dec 2017	MCMT Phase 1	
8 Jan – 9 Feb 2018	MCMT Phase 2	
Collateral Management testing by CSDPs to be facilitated	Timelines to be agreed with CSDP forum - meeting scheduled for 9 Nov 2017 at which this will be discussed	

Note: Collateral Management will be tested during MCMT however it will not be enabled from the ITaC go live day

- the functionality will be turned on after an agreed production bedding period
- JSE will consult with clients to agree what a suitable bedding period should be





Upcoming Milestones 2017

Date	Milestone	Status
26 Oct 2017	Enablement cut-off date for all clients	All enablements received have been processed (bear in mind standard SLA is 7 days)
2 Nov 2017	Complete all Live Connectivity (LCON) tests (technical)	Tests to prove technical handshake between application adaptors and the JSE Gateways - Currently underway
11 Nov 2017	Mandatory Market Facing Dress Rehearsal 1	Simulate a production business day - On Track
25 Nov 2017	Mandatory Market Facing Dress Rehearsal 2	Simulate a production business day



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Upcoming Milestones 2018

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Date	Milestone	Status	
1 Feb 2018	Final enablement amendments - cut-off date	Final enablement amendment request submissions (bear in mind standard SLA is 7 days)	
8 Feb 2018	Final Live Connectivity (LCON) tests	Last date to prove any enablement amendments ahead of go live	
17 Feb 2018 Contingency 24 Mar 2018	Mandatory Market Facing Dress Rehearsal 3	Execute final deployment and implementation activities Simulate a production business day	
19 Feb 2017	ITaC Go live	Equity Derivatives and Currency Derivatives start trading and clearing through the new ITaC solutions And are published via JSE PoP	
Contingency 26 Mar 2018		Decommissioning of Equity Derivatives and Currency Derivatives trading and clearing on the legacy Derivatives Nutron/Nuclears solution	
		Decommissioning of the DITCH Equity Derivatives market data feed to JSE London PoP	



Market Facing Dress Rehearsal Summary



Date	Description	Objective	Participation	Schedule
7 Oct 2017 21 Oct 2017	Software Provider Dress Rehearsal	Prove technical deployment activities and basic functional tests to test a selected set of their clients site setups	Mandatory for all trading, market data and clearing solution Software providers, own solution developers and SIPs	Successfully Completed
11 Nov 2017 25 Nov 2017	Mandatory Market Facing Dress rehearsal	Prove technical enablements and connectivity and conduct full functional testing	Mandatory for all member and live market data subscribers	08h00 – 14h00 On Track
17 Feb 2018 and contingency 24 Mar 2018	Proposed FINAL Mandatory Market Facing Dress rehearsal	Prove final cut-over deployment activities and technical connectivity tests (some functional testing may be required)	Mandatory for all members and live market data subscribers	08h00 – 14h00



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Participation in Dress Rehearsals



- ITaC November dress rehearsals are mandatory for:
 - All JSE Trading and Clearing Members that participate in the Equity Derivatives and Currency Derivatives markets regardless of how they access JSE trading and post trade services; and
 - All Real-time Information subscribers that connect directly to the JSE
 - All applications that connect directly to the JSE ITaC Equity Derivatives and Currency
 Derivatives production Gateways (i.e. API adapter) software that is not tested during these
 Dress Rehearsals will not be able to be deployed for go live
 - All CompIDs required for go live
 - 11 Nov 2017 clients may test with multiple software providers
 - 25 Nov 2017 clients may only test with the software they intend to go live with
- Only enablements that PASS the LCON tests will be available during the dress rehearsals
- Not mandatory for every trader to participate, however every Trader ID should be tested to prove correct authorisation in JSE systems and Software Front Ends
- Only conformed software can be used in dress rehearsals
- Dress rehearsals will be conducted in the JSE production environment



Participation in Dress Rehearsals



- Non Live Market Data subscribers do not need to participate in the November dress rehearsals
 - NLMD test files have been provided to clients
 - JSE looking to provide additional NLMD data files to clients as part of the Mandatory Clearing Member Testing (MCMT) – details will be communicated in due course
- Ensure you attend training for the software that you will be testing
- Ensure you have the support helpdesk contact details of your software provider for support during the dress rehearsals
- Contact the JSE urgently (<u>ITaC@jse.co.za</u>) if you are not able to meet the criteria or cut
 off dates
- Dress Rehearsal Checklists can be downloaded from the "Other Documentation" section of the ITaC webpage https://www.jse.co.za/services/itac
 - Mandatory Market Facing Dress Rehearsal Checklist (Trading) v1.0.pdf
 - Mandatory Market Facing Dress Rehearsal Checklist (Post Trade) v1.0.pdf



Dress Rehearsal Objectives



- Prove technical enablements and front-end connectivity ensure permissions and authentication is correct
- Conduct functional testing of trading and post-trade systems that you wish to implement
 - Test all functionality that your business is dependent on and that you do on a daily basis
 - Capture a controlled set of orders and trades, perform deal management activities and verify the outcome of the results on all screens, reports, downloads etc.
 - These are not high volume tests the focus should be integrity and accuracy of transactions generated
 - JSE has published a high level checklist of functionality to guide functional testing
- We recommended you test any downstream integration systems that are dependent on the ITaC API adapters to ensure end to end functionality prior to go live
- Familiarise yourself with the new systems and your new front-ends



Trading and Information Dress Rehearsal Schedule

Dress Rehearsal Times		
Start	End	Functional Testing to commence
04:15	14:00	Trading and Market Data systems start/end - heart beats start flowing
06:30	07:00	Start of day reference data published
		Off Book Trade Reporting period start – All Markets
08:00	12:00	- Cash Bonds
08:00	12:00	- Commodity Derivatives (CDM)
08:00	12:00	- Interest Rate Derivatives
08:00	12:00	- Equity Market (EQM)
08:00	12:00	- Currency Derivatives (FXD)
08:00	12:00	- Equity Derivatives (EDM)
08:20	08:30	EDM - Open Auction
08:30	12:00	Continuous Trading: Cash Bonds & IR Derivatives (IRD)
08:30	08:40	Commodity Derivatives: Pre-open
08:30	08:40	EQM for JSE & NSX : Open Auction (All segments)
08:40	11:40	EQM for JSE & NSX : Continuous trading
08:30	12:00	EDM - Continuous trading
08:30	12:00	FXD: Continuous trading
08:40	12:00	Commodity Derivatives: Continuous Trading
11:40	11:45	EQM - Closing Auction
11:45	12:00	EQM – CPP → CPX → EOD Volume Auction (5min each)
12:00	14:00	Admin Period for All Markets

- A detailed checklist is available on the ITaC webpage under the other documentation section
- A volume test period will be allocated during the continuous trading periods



Post-trade Dress Rehearsal Schedule



Dress Rehearsal Times		
Start	End	Functional Testing to commence
05:30	14:00	Post-trade Real Time Clearing (RTC) system start - Open state: Reference data subscriptions, position management, member client maintenance
08:00	12:00	Equity Derivatives (EDM) and Currency Derivatives (FXD) Markets - Off Book Trade Reports start feeding into RTC for all ITaC markets
08:30	12:00	EDM – On Book Trades feed through to RTC (starting after auction period), deal management, commissions, intraday price updates and risk monitoring
08:30	12:00	FXD – On Book Trades feed through to RTC, deal management, commissions, intraday price updates and risk monitoring
08:30	12:00	CDM, Cash Bonds & IRD – Deal & Position Management
12:00	12:15	EDM – EOD Deal & Position Management period
12:00	12:15	FXD – EOD Deal & Position Management period
12:00	12:15	CDM, Cash Bonds & IRD – EOD Deal & Position Management period
12:15	14:00	EDM & FXD - JSE End of Day batch processing commences
12:15	14:00	CDM, Cash Bonds & IRD - Clearing EOD process (net payments from legacy systems will be fed into new ITaC systems)

- A detailed post-trade checklist is available on the ITaC webpage under the other documentation section
- A volume test period will be allocated during the continuous trading period which will also feed trades into the Clearing Solution



11 Nov 2017 – Dress Rehearsal Key Dates



- Mandatory Market facing Dress Rehearsal scheduled for 11 Nov 2017
 - Key activities leading up to the dress rehearsal

Date	Milestone	Status
3 Nov 2017	Data cut taken from trading and post-trade systems for dress rehearsal (includes firm, trader ids, enablements, instruments etc.)	Executed by JSE within JSE environments - No action for clients
8 Nov 2017	Trading reference data client CSV files published	Software Providers, Shared Infrastructure Providers (SIPS), own solution developers and Host-to-Host clients to download files and process data
9 Nov 2017	Post-trade reference data can be downloaded via the RTC API (EMAPI)	Software Providers, Shared Infrastructure Providers (SIPS), own solution developers and Host-to-Host clients to download and process data
10 Nov 2017	Updated Trading reference data client CSV files published	Software Providers, Shared Infrastructure Providers (SIPS), own solution developers and Host-to-Host clients to download files and process data



Client Reference Data for Dress Rehearsals



Firm and Trader Details

- New ITaC Firm data will be used for the dress rehearsals
- The JSE Client Data team has provided compliance officers of Trading and Clearing Members with new production Firm details as was required for the enablement order forms
- In addition, Trading and Clearing Member's compliance officers were provided with a full list of Trader IDs that will be loaded for them into the new trading system
- Trader IDs must be provided to your software providers/solution developers so that these can be configured for use via the front-ends provided
- An audit of all Trader IDs is required and must be completed end of November 2017
- For any Trader ID amendments, Compliance Officer must complete the Officer <u>Registration/Deregistration form</u> on the JSE website and email the completed form to <u>ClientData@jse.co.za</u>
- New Trader ID standard is 5 numeric digits (0-9) confirm how your software provider has implemented this as they may mask it from you
- Traders registered in the Equity Derivatives and Currency Derivatives Markets will have one common unique numeric Trader ID across all markets for ITaC



Post-trade Client Reference Data

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- New ITaC Firm data will be used for the dress rehearsals
- JSE Client Data team has provided compliance officers of Trading and Clearing Members with new production Firm details as was required for the enablement order forms
- In addition, Trading and Clearing Member's compliance officers were provided with a full list of Trader IDs that will be loaded for them into the new trading and clearing systems
 - Clearing Members have a Trader ID for Trading Members they clear for (to do On Behalf Of)
 - Clearing Members also have their own Trader ID for back office activities
- All member clients and accounts including sub accounts which have an open position (open interest) as at end of day on 3 November 2017 will be migrated to the new Real Time Clearing (RTC) system
- All Tripartite agreements involving member clients loaded into RTC (refer point above) will be migrated
- In addition, we will migrate all accounts that have a zero open position but with interest accrued as at end of day on 3 November
- All open positions in production as at COB on Friday, 3 November 2017 for the instruments that have been loaded, will also be loaded in the dress rehearsal environment
- As per letter to Compliance Officers sent 5 Oct 2017 by JSE Market Regulation
 - Derivatives Rule 7.60.2 states that a member may not trade for or on behalf of a client until that client has been registered and Rule 7.60.2.2 specifies the information that a trading member must obtain from a client in order to register them. The JSE, in accordance with Rule 7.60.2.3, maintains a record of the clients that have been registered by members, as well as the client registration information members have captured in terms of Rule 7.60.2.2. The responsibility for ensuring that client registration details are up to date at all times is that of the member, as specified in Rules 7.60.2.3.1 and 7.60.2.3.2.
 - Compliance Officers must ensure that members undertake an exercise to **clean-up the client registration data** that they have captured on the JSE derivatives system prior to the go live of ITaC
 - Compliance officers are reminded to provide JSE Surveillance with a monthly update in respect of the progress of this
 exercise
 - Confirmation of the completion of the client registration data clean-up exercise is required from members by 31 December 2017



Instrument Reference Data



- All existing production derivative instrument types and new instrument types as per the new reference data standards and will be tested during dress rehearsals
- The following new instrument types will be included
 - Single Stock Dividend Neutral Anyday Future
 - International Equity: Anyday Future; Dividend Neutral Future; Dividend Neutral Inverse Calendar Spread; Dividend Neutral Anyday Future; Quanto Dividend Neutral Future
 - International Index: Anyday Futures & Options; Quanto Futures & Options
 - Forex Index: Future; Inverse Calendar Spread
 - Quanto Forex Anyday Futures & Options
- Annexure A at the end of this presentation contains a full list of new and existing instrument types
- For more details, please refer to <u>ITaC Instrument Reference Data Quick Reference Guide</u>
- A mapping between the old and new Contract codes will be provided prior to the dress rehearsals

Instrument					
Master ID	Nutron Code	ITaC Instrument Name	ITaC Contract Code	ISIN	ITaC Instrument Type
1000666	IMPS	IMP Single Stock Cash Base 100	21SEP17 IMP CSH	ZAD00000016	Single Stock Future
1000667	IMPS	IMP Single Stock Cash Base 100	21DEC17 IMP CSH	ZAD000000024	Single Stock Future
1000671	IMPS	IMP Single Stock Cash Base 100	21SEP17 IMP CSH 54.6P	ZADA0000018	Single Stock Option
1000672	IMPS	IMP Single Stock Cash Base 100	21SEP17 IMP CSH 54.6C	ZADA00000026	Single Stock Option
1000681	IMPS	IMP Single Stock Cash Base 100	21SEP17/21DEC17 IMP CSH	ZAD000000065	Inverse Calendar Spread



Support during Dress Rehearsals



- First line support to all client
- Standard production support model will be followed during dress rehearsals the Client Service Centre (CSC) is the first point of call and can be contacted on:
 - <u>CustomerSupport@jse.co.za</u> or
 - +27 11 520 7777
- Dress rehearsal status updates will be reported via a webpage to clients at the following link: https://www.jse.co.za/services/technologies/market-communications
- Clients to ensure the network changes and connectivity is in place
- Clients to ensure Customer Enablement Information Forms (CEIFs) are accurate as this is the information that has been captured into the production systems
 - CEIF contains all CompID and IP Addresses information per client
 - Each client will receive 3 IP Addresses primary, secondary and tertiary
 - These are the only IPs a client will be able to access in Production and Dress Rehearsals
 - Must PASS LCON tests prior to the dress rehearsals
- Clients making use of a Shared Infrastructure Provider (SIP) note!
 - SIPs will conduct LCONs with the JSE on the client's behalf to confirm that the backend can logon to the
 JSE for that client
 - Clients must test that they can logon to their SIP application from the desktop front-ends provided



User Readiness Tracking



- Each JSE client will be assigned a JSE user readiness contact ("buddy")
- The JSE appointed representative will contact the nominated ITaC person within the firm to exchange contact details (by Wed 8 Nov)
 - this person will be your escalation contact (if required) during the dress rehearsals
 - If a more senior escalation contact is required, please contact Leanne Parsons who is the JSE senior
 executive contact for ITaC and can be contacted via <u>LeanneP@jse.co.za</u> or via Client Service Centre
 (CSC) +27 11 520 7777
- Clients must monitor the JSE webpage for dress rehearsal status updates
- Clients who wish to subscribe to the dress rehearsal SMS updates must provide the following details to their user readiness representative or email ITaC@jse.co.za
 - Firm Name
 - Name & Surname
 - Cell phone Number
 - Email Address
- JSE will require sign-off from the ITaC Responsible Officer per client to confirm their success/results in the dress rehearsal – a template will be provided for this feedback
 - Technical capability successful
 - Tested minimum functionality and was successful
 - Enablements successful
 - Reference Data processing
 - Trader Groups and Trader IDs correct



User Readiness Tracking



- Some Items that will be tracked to assess your readiness for go live:
 - Nutron front-end solution replacement decision finalised and relevant agreements in place (if applicable)
 - Confirmed market data subscriptions for live and non live data targeting end Dec 2017
 - Signed JSA and related JDA (if applicable) targeting end Dec 2017
 - Direct connectivity to JSE finalised (if applicable) direct, colocation or JSE PoP
 - Confirmation that minimum bandwidth requirements of your solution are in place i.e. between client and JSE or client and their SIP
 - All enablements for dress rehearsals complete and Customer Enablement Information Form (CEIFs) signed off
 - Live Connectivity tests successfully completed for all enablements
 - Successful participation in the mandatory dress rehearsals
 - Participation in conceptual training for trading and/or post-trade services as well as Non Live Market Data services if subscribed to (optional but recommended)
 - Trading and Clearing Members: Trader ID audit and clean-up is complete and signed off
 - For Clearing Members, audit and clean-up of member client data has to be completed by end Dec 2017 and monthly status updates to JSE Surveillance
 - Review of updated Rules and JSE Directives completed



Dress Rehearsal Summary Checklist



- To ensure readiness for the dress rehearsals in Nov:
 - Front-end and other software successfully deployed into your environment
 - Signed Customer Enablement Information Form (CEIF)
 - Successful LCON test to prove end-to-end connectivity and receipt of multicast heartbeats
 - Attend JSE conceptual training available
 - Attend software training by your software provider/developer
 - Download and review dress rehearsal checklists define your firm test scenarios
 - Confirm to JSE "buddy" the key ITaC contact for the dress rehearsal
 - Provide contact details to JSE for SMS updates
 - Ensure clear roles and responsibilities within your team for testing and signoff of functionality required
 - Log all issues identified with JSE Client Service Centre (CSC) team
 - Ensure each user has their required front-end login credentials (to be provided by software provider/developer)
 - Completed dress rehearsal feedback form to be sent to JSE post the dress rehearsal
 - Trading and Clearing members to agree dress rehearsal interactions and requirements



Go live criteria

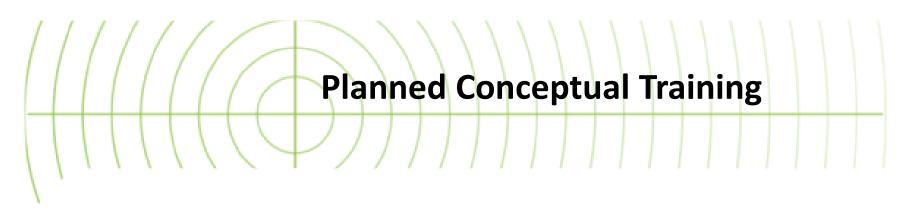


Minimum Go Live criteria for all clients

- Successful dress rehearsals and successful MCMT
- Only conformed software that was successfully tested during mandatory dress rehearsals can be used in the production environments and therefore go live
- Only enablements (CompIDs) successfully tested during the mandatory dress rehearsals can go live with ITaC
- Clients must ensure that they connect via an accredited <u>JSE Network Service Provider (NSPs)</u>
 or an accredited <u>Shared Infrastructure Provider (SIPs)</u>
- Signed JSE Services Agreement (JSA) and JSE Data Agreement (JDA) to be in place
- All user readiness checklist items completed and signed off
- For Clearing Members:
 - Clearing Members to ensure signed JSA is submitted prior to the start of Mandatory Clearing Member testing (MCMT) on 13 Nov 2017
 - Successful participation in Mandatory Clearing Member Testing (MCMT)
 - Signoff of data take-on open positions
- A freeze period is proposed post go live this means a freeze to all enablements whether new/changed as well as the take-on of new clients/services



JS≣





Conceptual Training scheduled for 2017



- Post-trade Services Conceptual Training
 - Session 1: 3 November 2017 13h00 14h30
 - Session 2: 16 November 2017 13h00 14h30
 - Sessions are open to all clients who wish to gain a better understanding of the ITaC
 Clearing process and is NOT limited to Clearing Members only
 - Both sessions will cover the same content
 - If you wish to attend, please email <u>GabrielleHB@jse.co.za</u>
- Trading Conceptual Training
 - Session 1: 8 November 2017 10h00 12h00 invitation to be issued
 - Session 2: TBC
- Non-Live Market Data information session
 - Scheduling is in progress to be confirmed



Questions?

JS≣



Please refer all queries to the JSE Client Service Centre (CSC)



CustomerSupport@jse.co.za



+27 11 520 7777



Dress Rehearsals – Trading



To allow trading and clearing members, market data clients and any other clients of the JSE to simulate an operational day on new the ITAC production trading system

- This is achieved by ensuring all <u>technical</u> activities are completed and enabled and all <u>functionality</u> exists on the system including, but not limited to:
 - Proving successful routing connectivity into the JSE ITAC Trading infrastructure including all TCP connections and UDP subscriptions.
 - *JSE production IP Address information circulated to all clients at end of August (trading members, software providers and Shared Infrastructure Providers (SIPs)) to assist clients with early change management implementation*
 - Proving successful connectivity and login to the JSE production environment and all trading and market data gateways both TCP and multicast (UDP) including from JSE Client Access Network and JSE Colocation:
 - Native Trading Gateway
 - Drop Copy Gateway
 - Post Trade Gateway
 - Market Data Gateways (Level 1 and Level 2)

Standard LCON process applies. Enablement order forms must be submitted by each trading member to ensure CompID details can be setup



Dress Rehearsals – Trading



- Proving successful creation of member firms and all associated enablements:
 - TraderGroups are created successfully on the system and used by trading firms, this will include the public-facing trader group
 - CompIDs are enabled and logged in across <u>all gateways</u> and a 'on-behalf-of' CompID has been provided to the clearing member by each trading member
 - TraderIDs are enabled and exist for all confirmed traders/dealers
- Proving readiness to JSE systems from client's perspective:
 - Client frontend integration to the new Trading system and amended production system for non-ITaC derivatives markets
 - Frontends that are exclusively used internally by all clients that have undergone changes
 - Integration of all client systems downstream due to ITAC implementation
 - Communication or system changes to the clearing member and how processes may have changed



Dress Rehearsals – Trading



- Proving Reference Data consumption and usage by all participants
 - Connectivity to the JSE IDP site for reference data files
 - User-created instruments
 - Create an option on an Anyday Future that has been created by the firm already as per instructions to be provided by the JSE
 - Create a DELTA option
 - Auto-creation of strikes limited to ALSI, DTOP, USDZAR
- Proving Order and Quote submission and flow
 - Implied Across orders are only enabled for
 - ALSI, DTOP, USDZAR
 - Submit at least one order in the market the client is a member of
 - Cancel an order and amend an order
 - Ensure quotes are submitted if clients are market makers
 - Optional: submit an order type using each TIF, not only DAY e.g. GTC, GTD, etc



Dress Rehearsals – Trading



- Proving an On Book trade match
- Proving an On Book trade on a strategy instrument for a
 - Delta Option and
 - Inverse Calendar Spread
- Proving Off Book Trades all 5 types (CFD Trade, Roll Trade, Strategy Trade, Negotiated Trade, Price Adjust)
 - Should submit at least one dual- and one single-sided Off Book Trade Report per trade type
- Proving On-behalf of Trading
 - Clearing members to submit at least one Off Book Trade Report on behalf of a trading member
- Proving On Book/Off Book Trade Cancellations
 - Clearing members to cancel one On Book Trade and one Off Book trade on behalf of one of their trading members
- Proving existing production for CMD; Cash Bonds & IRD



Dress Rehearsals – Trading Success Criteria



- Principle is to allow all clients to test all of their systems and interactions to the JSE and also allow them to perform a production-like trading day
- JSE will check that clients have performed the minimum requirements, but will not expect a checklist to be submitted as proof of their testing
- No pass/fail reports will be issued by the JSE
- Clients to conduct sufficient testing and full functional highly recommended
- JSE will require signoff from the Responsible Officer to confirm their success in a dress rehearsal – a template will be provided
 - Technical capability successful
 - Tested minimum functionality and was successful
 - Enablements successful
 - Reference Data correct
 - Trader Groups and Trader IDs correct
 - Confirmation to proceed to next phase



Annexure C

Dress Rehearsals – Post-trade



To allow trading and clearing members, market data clients and any other clients of the JSE to simulate an operational day on new the ITAC production Post-Trade Solution

Overview

- This is achieved by ensuring all technical activities are completed and enabled and all functionality exists on the system including, but not limited to:
 - Proving successful routing connectivity and authentication into the JSE ITaC Posttrade solution including all TCP connections
 - JSE production IP Address information will be circulated to all clients
 - Enablement order forms must be submitted by each trading and clearing member and market data client to ensure User ID details can be setup



Annexure C

Dress Rehearsals – Post-trade



- Proving readiness to JSE systems from a client's perspective:
 - Client frontend integration to the JSE ITaC Post-trade Solution
 - Integration of all client systems downstream due to ITaC implementation
 - Proving of successful login to the JSE's Post-trade Solution and testing of all subscription mechanisms as well as consumption of reference and transactional data
 - Proving existing production for CMD, Cash Bonds & IRD



Annexure C

Dress Rehearsals – Post-trade



High level functionality

- Consumption of start of day and intraday reference data updates
- Listening to trade updates resulting from trading engine activities
- Listening to subsequent position and risk event updates resulting from trading engine activities
- Performing deal management activities and listening to resultant position and risk event updates
- Performing commissions management activities
- Listening to price events and resultant intraday risk event updates
- JSE will run the Clearing EOD after the deal management period ends to allow Clearing Members wishing to balance on margins and fees the opportunity to do so

Note: Securities collateral is not in scope of the dress rehearsals; this will be test in MCMT

