



# Integrated Trading and Clearing (ITaC)

Client Forum

20 June 2018

## Agenda

- ITaC London Roadshow
- ITaC Project Timeline and Key Dates
- ITaC End-To-End (ETE) testing
  - Objectives for start of ETE on 26 June 2018
  - Approach to ETE including run plan and daily communication
- ITaC Dress Rehearsal 14 July 2018
  - High level objectives, approach and participation requirements
- Questions?

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# ITaC London Roadshow



Invitation to join Leanne Parsons at a focused information session being held in London

## Session Agenda:

- Overview of ITaC
- Key concepts or business aspects that will change
- ITaC timeline and status update

Feel free to extend this invitation to your London based clients whom you feel may benefit from the session

Date: Tuesday, 26 June 2018

Time: 14h30 – 16h00 British Standard Time (BST)

Venue: Grange St. Paul's Hotel (Churchill Conference Room), 10 Godliman Street, London, EC4V 5AJ, UK

As space at the above session is limited, JSE team will also be available between 27 and 29 June 2018 on a first come, first served basis for further one on one engagement sessions with clients - **please email [ITaC@jse.co.za](mailto:ITaC@jse.co.za) to arrange an appointment**

In light of this – there will be **NO PROJECT FORUM** next week **Wed, 27 June 2018**.



- **Agenda**

- ITaC London Roadshow

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- Most recent consultation with key stakeholders reached consensus on and a commitment to a targeted go-live date with a closed scope
- Go-Live is subject to certain critical milestones being met
- A Market Steering Committee comprising representatives from the JSE, Clearing Members (and their software provider), Strate and some Trading Members has been formed and kicks off this week:
  - Agree scope changes
  - Review the success of ETE testing and dress rehearsals
  - Agree market go-live readiness criteria and monitor progress against these
  - Recommend to JSE Executive Go/No-Go at Go-Live
- Minutes of the Market Steering Committee meetings which will be outcome based will be made available to all ITaC Primary and Responsible Officers

# ITaC Key Dates



Date	Milestone
11 Jun – 22 Jun 2018	Clearing Member & Software Provider Testing in ETE environment
25 Jun 2018	Start of End to End Testing in ETE environment
<b>25 Jun – 5 Jul 2018</b>	<b>ETE Testing – Cycle 1 Structured</b>
9 Jul – 13 Jul 2018	Prep for MMDR; data clean up and full position take on
<b>14 Jul 2018</b>	<b>Mandatory Market Dress Rehearsal (MMDR)</b>
<b>16 Jul – 26 Jul 2018</b>	<b>ETE Testing – Cycle 2 Structured</b>
<b>30 Jul – 10 Aug 2018</b>	<b>ETE Testing – Cycle 3 Scripted</b>
13 Aug – 17 Aug 2018	Prep for Dress Rehearsal; data clean up and full position take on
<b>18 Aug 2018</b>	<b>ETE Dress Rehearsal – mandatory for all clients</b>
<b>20 Aug – 4 Sep 2018</b>	<b>ETE Testing – Cycle 4 Scripted</b>
<b>15 Sep 2018</b>	<b>Go-Live Ready Dress Rehearsal – mandatory for all clients</b> JSE will take RTC live into production
<b>8 Oct 2018</b>	<b>Targeted Go-Live Date (could also use 15 Oct 2018)</b>
<b>12 Nov 2018</b>	<b>Contingency Go-Live Date</b>

PLEASE NOTE:  
Mandatory for CMs and those TMs & live Information subscribers that have not passed two dress rehearsals

PLEASE NOTE:  
Mandatory for all clients

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# ITaC Agreements – cutoff dates

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- **JSE Services Agreement (JSA)**
  - Signed JSA is required to access all production and test services including the End-To-End environment
  - JSA must be signed by Friday, 27 July 2018 which is prior to the start of Scripted End-To-End testing on Monday, 30 July 2018
- **JSE Data Agreement (JDA)**
  - Signed JDA is required to access all real-time market data (production and test) and non-live market data (production and test)
  - JDA must be signed by Friday, 27 July 2018 for clients wishing to participate in Scripted End-To-End testing which starts on Monday, 30 July 2018
  - JDA must be signed by 31 August 2018 for all other clients not participating in ETE testing



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# End-To-End (ETE) Testing



- Two phases of End-to-end testing are envisaged:
  - **Structured ETE testing** - test specific identified scenarios and events on specific days
  - **Scripted ETE testing** – ring fenced with specific data and functionality on specific days with specific expected outcomes as well as other testing along side
- **Structured ETE testing starts on 26 June and will have 2 cycles**

## ***Full Direct participation***

*Trading members connect and execute* throughout Cycles;  
*Clearing members execute On-Behalf-Of's and clearing functions;*  
EOD reports checked by clearing members, trading members and clients;  
Live Market Data verified by subscribing clients

## ***Partial Direct participation***

Trade packs submitted by JSE;  
*Deal management executed by Trading Members;*  
*Clearing Members execute On-Behalf-Of's and clearing functions;*  
EOD reports checked by clearing members, trading members and clients;  
Live Market Data verified by subscribing clients

## ***Indirect participation***

Trading packs submitted by JSE;  
*Clearing Members execute On-Behalf-Of's and clearing functions;*  
EOD reports checked by clearing members, trading members and clients;  
Non-Live Market Data products checked by subscribing clients

- Testing will be managed and any unusual activity will need to be addressed
- Outcomes of ETE testing will be measured against identified criteria and results published

# End-To-End (ETE) Testing – High Level Plan



- **Structured ETE testing** - test specific identified scenarios and events on specific days
  - 2<sup>nd</sup> week – any additional scenarios that are required to be included in week 2, please submit requirements by no later than 12h00 Monday 25 June 2018

## Structured ETE

### 1<sup>st</sup> Week

26 – 29 June 2018

### 2<sup>nd</sup> Week

2 Jul – 6 July 2018

## High level plan

### By 09h00

Standard JSE trade pack  
processed by JSE

### 07h30 – 13h30

Execute On Book trading.  
Report Off Book trades.  
Generate user created instruments  
and trade on these.  
Process live market data.

### 07h30 – 13h30

Perform deal management activities

### 13h30 – 16h00

End of day procedures and balancing  
with Clearing Members

## To Note:

Trading Members to perform an  
Own Order Book and / or  
Own Trade Book Download to  
synchronise JSE generated  
trades in their system.

Live market data subscribers to  
verify multicast data.

Perform deal management and  
your own internal downstream  
integration testing

NLMD files available from  
~20h00  
(check next business day)

# End-To-End (ETE) Testing



- **What are the service times for ETE testing ?**
  - 07h30 – 13h30 Trading (On Book, Off Book) and real-time/live Market Data published
    - Opening Auction: 7:30 – 8:00 (EDM only)
    - Continuous Trading: 8:00 – 13:00
    - Post Close: 13:15 – 13:30, Market End: 13:30, Day End: 15:00
  - 07h30 – 13h30 Real-Time Clearing for deal management and clearing activities
  - ~13h30 – 16h00 End of day clearing procedures and other EOD processes
  - ~20h00 Availability of Non-Live Market Data files (check next business day)
- **Where can I access the ETE testing documentation?**
  - All documentation required for ETE testing will be available on the JSE [ITaC webpage](#) under the section “End-To-End Testing”
- **How will we be kept informed of ETE testing progress and status?**
  - A communication webpage has been created to keep clients updated on the status and progress of ETE testing
  - The URL will be sent to all ETE participants as and when we confirm their participation
- **Who do we contact for first line support of all queries, enablement or issues experienced during ETE testing?**
  - Contact Client Service Centre (CSC) on [CustomerSupport@jse.co.za](mailto:CustomerSupport@jse.co.za)  
or +27 11 520 7777

# End-To-End (ETE) Testing



- **What should be tested?**
  - All front end software and functionality
  - All downstream, back office integration and other impacted systems
  - Market Making and automated trading applications
  - DMA applications
  - Reports to Clients
  - System set up and configuration especially client account parameters (e.g. commission %), trader permissions, tripartite arrangements
  - NOT A VOLUME TEST – keep volumes low to ensure verification and checking of data is simplified
- **Examples of scenarios**
  - Client Management
    - E.g. Add, Amend client
  - Instrument Management
    - E.g. Add tradeable instrument and execute trades
  - Order Management
  - Trade Management
  - Deal Management
  - Position Management.....ETC

# End-To-End (ETE) Testing – How to get access?



- **Members and Live Information subscribers** to contact [CustomerSupport@jse.co.za](mailto:CustomerSupport@jse.co.za) via email to request enablement IP address information and to schedule required connectivity tests
  - Provide the ComplIDs for Trading and RTC that you will connect with
  - Request the target IP address details for Native Trading, Post Trade and Drop Copy Gateway and ensure you configure these in your test environment
  - Production enablements as used during dress rehearsals have been copied to ETE environment - no new enablements will be created and JSE will update existing enablements to include the IP addresses that you will connect from
  - CSC will arrange for NW enablement of the nominated ComplIDs
    - Participants can only join ETE testing at the start of a week and/or cycle and the cut off is 12h00 on the Wednesday (Thursday/Friday for enablement and LCON)
    - Test connectivity (LCON) to the ETE environment prior to the start of a week and/or cycle
    - Template of information required:

Software Provider	XXX			
Member Firm	Native ComplID	Trading	Post Trade ComplID	Drop Copy ComplID
ABC				

- **Non-Live Information subscribers** to contact [MDSupport@jse.co.za](mailto:MDSupport@jse.co.za) via email to request access to the Non Live Market Data products

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# Measuring Success of Dress Rehearsals



- What the JSE measures – input/suggestions welcome

## Trading

Connectivity and authentication  
Order management & On Book trading  
Off Book Trade Reports (incl OBO)  
Trade Cancellations (incl OBO)  
Trading Session changes  
User created instruments

## Market Data

Connectivity and authentication  
Successfully receive and process real-time multicast data and replay/recovery  
Process trading session changes published e.g. auction, uncrossing etc.

## Deal Management

Connectivity and authentication  
Perform deal management activities e.g. Assign, allocate, tripartite etc.  
Capture service fees (commissions)  
View positions

## Clearing

Receive and process trades  
Perform deal management activities e.g. assign, allocate, tripartite  
Capture service fees (commissions)  
View positions  
Verify booking fees  
Verify margins



# Measuring Success of Dress Rehearsals



- Feedback from clients to simplify the dress rehearsal functional test checklist
  - JSE busy revising the trading and post-trade business test checklists to be more meaningful and relevant to traders and/or back office staff and guide important scenarios for testing
  - For trading members, JSE will indicate who your two trading counterparties are for the day for trading
  - For clearing members, JSE will agree with clearing member, the trading members to be used for On-Behalf-Of's for Off Book Trade Reporting
  - **Dress rehearsal checklists do not need to be completed and returned to JSE but Members will need to confirm what business functionality is NOT APPLICABLE to their business**
    - JSE will use transaction data from the systems to evaluate results for pass criteria
    - Business functionality that is NOT APPLICABLE to their business will only be excluded when deriving dress rehearsal results if this has been provided to the JSE
  - Technical system test criteria will not change from previous dress rehearsals and measurement of technical transactions will remain as is – this applies to trading, market data and post-trade
- Pass / Fail criteria will mostly be the same as for 12 & 26 May 2018 except we will add criteria for ensuring normal market behaviour e.g. volatility auctions and price band breaches
- Measurement criteria for 18 August 2018 Dress Rehearsal will be increased to cover go-live readiness aspects

# Sample of Revised Dress Rehearsal Checklist



## Equity Derivatives

	EDM On Book Trading (prev called On Screen Trading)				EDM Off Book Trade Reporting (prev called Reported Trading)
	Open Auction 08h30 - 08h40	Continuous Trading 08h40 - 12h00	Volatility Auction 08h40 - 12h00	Post Close 12h00	Trade Reporting Period 08h00 - 12h15
<b>Index Futures and Options - Basic Trading</b>	<b>Business Rules:</b> Use ALSI/DTOP/DCAP near month contract with realistic prices	<b>Business Rules:</b> Use ALSI/DTOP/DCAP near month contract with realistic prices  <b>08h45 - 09h30</b> Market Order (MO) - Enter Order - Edit Order - Cancel Order  Limit Order (DAY) - Enter Order - Edit Order - Cancel Order  <b>10h30 - 11h00</b> Create a ANYDAY contract (if applicable)  <b>10h45 - 11h45</b> Submit On Book Trade Cancellation - select a trade where you are on both sides	<b>Business Rules:</b> JSE will request a member to invoke a volatility auction in ALSI/DTOP/DCAP  <b>09h30</b> Edit/Cancel Orders in the Volatility Auction	<b>12h00 - 12h15</b> Cancel Orders	<b>Business Rules:</b> <b>JSE will indicate who your two counterparties are for the day</b>  <b>09h15 - 09h30</b> 1) Report two Single sided Negotiated Trades (NT) 2) Cancel one of the Single sided NTs  <b>09h45 - 10h45</b> 1) Initiate a Dual Sided Negotiated Trade (NT) in the ALSI using one of your JSE allocated counterparties 2) Accept a Dual Sided Negotiated Trade (NT) in the ALSI from one of your JSE allocated counterparties 3) Initiate a Dual Sided Negotiated Trades (NT) in the ALSI using the other JSE allocated counterparty and then cancel before counterparty accepts 4) Reject a Dual Sided Negotiated Trades (NT) in the ALSI from one of your JSE allocated counterparties 5) Initiate a cancellation of a Dual Sided Negotiated Trade (NT) in the ALSI with one of your JSE allocated counterparties  Repeat the above using DTOP and DCAP Repeat the above using your newly created ANYDAY contract (if applicable)

# Sample of Revised Dress Rehearsal Checklist



## Currency Derivatives

	FXM On Book Trading (prev called On Screen Trading)			FXM Off Book Trade Reporting (prev called Reported Trading)
	Continuous Trading 08h40 - 12h00	Price band breach events 08h40 - 12h00	Post Close 12h00	Trade Reporting Period 08h00 - 12h15
<b>Currency Futures and Options - Basic Trading</b>	<p><b>Business Rules:</b> Use USDZAR/EURZAR/GBPZAR near month contract with realistic prices</p> <p><b>08h45 - 09h30</b> Good Till Cancel (GTC) - Enter Order - Edit Order - Cancel Order</p> <p>Limit Order (DAY) - Enter Order - Edit Order - Cancel Order</p> <p><b>10h30 - 11h00</b> Create a ANYDAY contract (if applicable)</p> <p><b>10h45 - 11h45</b> Submit On Book Trade Cancellation - select a trade where you are on both sides</p>	<p><b>Business Rules:</b> JSE will request a member to invoke a price band breach in a USDZAR futures contract</p>	<p><b>12h00 - 12h15</b> Cancel Orders</p>	<p><b>Business Rules:</b> JSE will indicate who your two counterparties are for the day</p> <p><b>09h15 - 10h45</b> <b>The following scenarios are for Standard Expiry Futures</b> 1) Initiate a Dual Sided Negotiated Trade (NT) in the EURZAR using one of your JSE allocated counterparties 2) Accept a Dual Sided Negotiated Trade (NT) in the EURZAR from one of your JSE allocated counterparties 3) Initiate a Dual Sided Negotiated Trades (NT) in the GBPZAR using the other JSE allocated counterparty and then cancel before counterparty accepts 4) Reject a Dual Sided Negotiated Trades (NT) in the GBPZAR from one of your JSE allocated counterparties 5) Initiate a cancellation of a Dual Sided Negotiated Trade (NT) in the EURZAR with one of your JSE allocated counterparties</p> <p>Repeat the above for Standard expiry Options Repeat the above using your newly created ANYDAY contract (if applicable)</p>

# Participation in Dress Rehearsals – 14 July 2018



- This dress rehearsal is **Mandatory** for:
  - All Clearing Members
  - All Equity Derivatives and Currency Derivatives Trading Members that have not successfully passed 2 dress rehearsals
    - Letters confirming your overall Firm's dress rehearsal results and required participation for 14 July 2018 will be issued to compliance officers this week
  - All Live Information subscribers with direct connectivity to the JSE (for ITaC EDM and FXM services) that have not successfully passed 2 dress rehearsals
    - Letters confirming your overall Firm's dress rehearsal results and required participation for 14 July 2018 will be issued to key contacts this week
  - All software providers (trading, deal management and clearing)
  - All Shared Infrastructure Providers (SIPs)
- Even though it is not mandatory for International Access Point clients subscribing directly to the JSE (for ITaC EDM and FXM services) to test – it is highly recommended
- Non Live Market Data subscribers do not participate in the dress rehearsal – they can participate in End-To-End Testing

# Dress rehearsal preparations

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- Verify all software bugs, configuration and setup issues reported during the last dress rehearsal(s) with your software provider have been resolved and are tested in ETE or the CTS environment prior to the 14 July dress rehearsal
- Confirm all final enablements are in place – REMINDER that Dress Rehearsals are conducted in the production environment and therefore trading connectivity is different to the ETE testing environment
- Attend training on your front-end functionality with your software providers prior to the dress rehearsal

# Questions?



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



[CustomerSupport@jse.co.za](mailto:CustomerSupport@jse.co.za)



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