



# Integrated Trading and Clearing (ITaC)

Client Forum

12 September 2018

# Agenda

- ITaC Key Dates
- ITaC Market Dress Rehearsal 15 September 2018
  - Recap of objectives, approach and measurement criteria
- End-To-End (ETE) Testing Status and Feedback
  - ETE Cycle 4
  - ETE Cycle 4A - focused business events
  - ETE Cycle 5
- General
  - Monthly User Readiness report timeline for September
- Questions?

# ITaC Key Dates



| Date                           | Milestone  |
|--------------------------------|--|
| <del>20 Aug – 3 Sep 2018</del> | <del>ETE Testing – Cycle 4 Scripted</del>  |
| <del>4 Sep – 7 Sep 2018</del>  | <del>ETE focused Test</del>  |
| 10 Sep – 14 Sep 2018           | MMDR 8 Prep  |
| 15 Sep 2018                    | Go-Live Ready Dress Rehearsal – mandatory for all clients  |
| 17 Sep – 1 Oct 2018            | ETE Testing – Cycle 5 Scripted   |
| 3 Oct 2018                     | Go-Live Checkpoint with ITaC Market Steering   |
| 6 Oct 2018                     | <ul style="list-style-type: none"> <li>- Go-Live Practice (JSE &amp; Clearing Members)</li> <li>- Optional Dress Rehearsal (will be mandatory for those trading members that still need to pass a remaining MMDR)</li> </ul> |
| 8 Oct – 12 Oct 2018            | Go Live Confirmation Cycle 1   |
| 17 Oct – 23 Oct 2018           | Go Live Confirmation Cycle 2   |
| 27 Oct 2018                    | JSE deploys RTC/CIS into production  |
| 29 Oct – 9 Nov 2018            | RTC Daily Production Runs  |
| 12 Nov 2018                    | Targeted Go-Live Date  |

**We are here**

PLEASE NOTE:  
Mandatory for all clients for  
**ALL ITaC MARKETS**

Including EQM, EDM, FXM

# ITaC Key Dates

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- **3 Oct 2018**
  - ITaC Market Steering Committee decision on 12 November go-live
- **6 Oct 2018**
  - Go-Live Practice rehearsal – JSE & Clearing Members
  - Optional Dress Rehearsal however will be mandatory for those Trading Members that still need to pass a remaining MMDR
- **08 Oct – 12 Oct 2018**
  - Go Live Confirmation Cycle 1 – Mandatory clearing member go live proving test
- **17 Oct – 23 Oct 2018**
  - Go Live Confirmation Cycle 2 – Final Mandatory clearing member go live proving test
- **27 Oct 2018**
  - JSE deploys Real-Time Clearing (RTC) and Clearing Integration System into production
  - Daily instrument reference data maintained in parallel to current production environment and published via new real-time Live and NLMD services daily
- **29 Oct – 9 Nov 2018**
  - Real-Time Clearing (RTC) Daily Production Runs – daily system start-up and end of day processing and logical day rollover

# ITaC Agreements – for ITaC 1b and 1c (EDM & FXM)

**OVERDUE!**



**TO AVOID TEST SERVICE DEACTIVATION POST 17 SEPTEMBER 2018**

- **JSE Services Agreement (JSA)**
  - If you have not yet signed your JSA - Kindly contact [JSA@jse.co.za](mailto:JSA@jse.co.za) or 011 520 7478 / 7689
- **JSE Data Agreement (JDA)**
  - If you have not yet signed your JDA - Kindly contact [MDClients@jse.co.za](mailto:MDClients@jse.co.za) or 011 520 7157

## Agenda

- ITaC Key Dates
- **ITaC Market Dress Rehearsal 15 September 2018 Recap**
  - Recap of objectives, approach and measurement criteria
- End-To-End (ETE) Testing Status and Feedback
  - EE Cycle 4
  - ETE Cycle 4A focused business events
  - ETE Cycle 5
- General
  - Monthly User Readiness report timeline for September
- Questions?

# High Level Dress Rehearsals Objectives



- **Key objectives** of the Go-Live Ready Dress Rehearsal:-
  - **Simulate a normal production business day for all ITaC Markets**
    - To ensure all Markets operate successfully together on ITaC go live
  - **All ITaC functionality, deployment and cut-over activities are successful**
    - Prove all access credentials correctly configured (CompIDs, Trader Groups, Trader IDs including back office users), etc.
    - Test and confirm that your chosen front end meets your business requirements
    - Test all system integration and ensure that the right information is passed between various system
    - Verify business integration between Trading Members and their Clearing Members
    - Practice deployment and cut over activities of your solutions
    - Prove your Firm's readiness for go-live to ensure you continue to operate successfully

• **ACHIEVE THE REMAINING DRESS REHEARSAL PASS CRITERIA REQUIRED**

# Participation in Dress Rehearsal – 15 Sept 2018

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- **Equity Market**

- **Mandatory** for all clients
- At least one user per Trading Member but as many as required to simulate a normal production day
- All Live Information subscribers with direct connectivity to the JSE
- All Shared Infrastructure Providers (SIPs)

- **Equity Derivatives and Currency Derivative Markets**

- **Mandatory** for all clients: **whether you have passed 2 dress rehearsals or not**
- All Clearing Members
- All Trading Members
- All Live Information subscribers with direct connectivity to the JSE
- All software providers (trading, deal management and clearing)
- All Shared Infrastructure Providers (SIPs)



# Participation in Dress Rehearsal – 15 Sept 2018



- **Equity Derivatives and Currency Derivative Markets**
  - **Prove all access credentials – Every Trader ID must be tested** (unless JSE has specifically indicated otherwise to your firm)
    - *including TraderIDs assigned to back office trading AND clearing staff to perform deal management activities*
  - **Trading Members test:**
    - **All** Trader IDs for Trading activities
    - **All** Trader IDs that will be used for Deal Management activities – the relevant Trader ID must test at least one deal management activity that is a pass criteria and requires a Trader ID to be included
    - **All** User IDs in RTC that you intend to go-live with
  - **Clearing Members test:**
    - **All** Trader IDs permissioned by their trading members for On-Behalf-Of functionality
      - Trade Reporting – Each Trader ID must submit at least one Off Book Trade Report
      - Deal Management – Each Trader ID must submit at least one allocation/assign
    - **All** User IDs in RTC that you intend to go-live with

# Equity Market – key steps to success!



1

Test is in Production Environment

2

Mandatory participation for all clients – at least one representative per firm, of interfaces connecting directly to the JSE gateways

3

Trading Members: Simulate normal production business day activity

4

Information Subscribers: Subscribe to and process all market data

5

CLEAN UP all test data generated during the test to ensure no impact to business on Monday

# Derivatives Markets - key steps to success!



1

Test is in Production Environment

2

Mandatory participation for all clients

3

All clients MUST PASS all defined minimum criteria as this is a Go Live Ready dress rehearsal

4

**Trading Members:** Must successfully submit at least ONE ORDER OR TRADE PER TRADER ID. For BackOffice Trader IDs at least one deal management activity

5

**Trading Members:** Must successfully execute all the Deal Management activities that are applicable to them (unless the clearing member does this on their behalf as part of normal BAU)

6

**Clearing Members:** Must successfully execute all the activities that are conducted On Behalf Of (OBO) trading members that they clear for and where OBO is normal BAU or the Clearing Member is the business continuity fail safe

7

**Clearing Members:** Must successfully execute all their BAU clearing activities

# Participation in Dress Rehearsal – 15 Sept 2018

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- **Live Information Subscribers**

- Subscriber to real-time multicast data
- Login to perform recovery via the Replay and Recovery Gateways
- Verify the new Symbol Directory message for the user created instruments change
- International Access Point subscribers **MUST ALSO** test

- **Non Live Market Data subscribers**

- We will produce the NLMD files for Equity Derivatives and Currency Derivatives market as part of EOD run
- Verify content post the dress rehearsal

# Dress Rehearsal Checklists



- **Equity Market**
  - A high level test schedule has been published click [here](#)
  - NO CHECKLIST to be completed or returned to the JSE
  - Simulate normal business activity for a normal production day
  - **PLEASE USE REALISTIC PRICES AND MAKE THE TEST SUCCESSFUL FOR EVERYONE!!**
- **Equity Derivative and Currency Derivative Markets**
  - Dress rehearsal results are generated by the JSE based on transaction data in JSE systems – retain your system logs
  - Checklist link - <https://www.jse.co.za/services/itac#OtherDocumentation>

| Trading Business Functional Test Guide  | Post-trade Checklist   |
|---|--|
| <b>DO NOT</b> need to be completed & returned to the JSE  | <b>Must be completed</b> and returned to the JSE by Trading and Clearing Members |
| All functionality highlighted in Yellow is mandatory – <b>PLEASE USE MOST RECENT VERSION AS THERE ARE CHANGES</b> | Mandatory functionality identified by column “Part of MMDR Success criteria”     |
| • <b>Pass mark is 85% for EDM &amp; FXM</b>   | • <b>Pass mark is 80%</b>  |
| <b>Confirm what business functionality is not applicable to your firm</b>   |  |

# Dress Rehearsal Scope Exclusions

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- Remember to **confirm what business functionality is not applicable** to your firm
  - **Please also ensure that if a Trading Member outsources functions to a Clearing Member that this is clearly indicated in your Post-trade checklist returned to the JSE**
  - Business functionality **not applicable to your business** and as provided to the JSE for August dress rehearsals will be used for September test results
    - If you did not previously provide these business exclusions - kindly send an email to your JSE buddy indicating the scenario(s) not applicable to your Firm
    - Your JSE buddy will update the recent Dress Rehearsal Test Worksheet with functional exclusions

# Measuring Success of Dress Rehearsals



- **Equity Derivative and Currency Derivative Markets**
  - **ALL CLIENTS MUST PASS the minimum criteria in this dress rehearsal as Software Providers have made changes to their Front Ends and the JSE has implemented some bug fixes**

| Clients                        | Business  | Technical  |
|--------------------------------|---|--|
| <b>Trading Members</b>         | <p>Same as previous tests EXCEPT no AM order but LIMIT order</p> <p><b>PLUS</b></p> <p><b>Less than 5</b> volatility auctions and price band breaches initiated by the Firm overall</p> <p><b>Every Trader ID</b> needs to be tested (unless JSE has indicated otherwise to you specifically)</p> <p>Confirm Clearing Member performs all business as usual activities on your behalf <b>where applicable</b></p> <p>Confirm Clearing Member tests their Trader IDs for your firm</p> | <p>Same as previous tests</p> <p><b>Login</b> to all Native Trading, Post-Trade and Drop Copy GWs</p> <p>Own Order Book Download (<b>OBD</b>)</p> <p>Own Trade Book Download (<b>OTBD</b>)</p> <p>Reconnect via Gateway failover</p> |
| <b>Clearing Members</b>        | <p>Same as previous tests</p> <p><b>PLUS</b></p> <p><b>Every Trader ID for every Trading Member</b> needs to be tested</p>  | <p>Same as previous tests</p> <p>Login all RTC User IDs</p> <p>Execute at least one of every deal management On-Behalf-Of activity per Trading Member they clear for</p>   |
| <b>Information Subscribers</b> | <p>Same as previous tests</p> <p>Subscribe to and process real-time market data</p> <p>- Process suspensions/halts</p>  | <p>Same as previous tests</p> <p>Recover missed multicast data via the Replay/Recovery Gateways</p> <p>Reconnect via Gateway failover</p>  |

# Dress Rehearsal 15 Sept 2018 – Reference Data



## Fri 7 Sept 2018

- Production data cut taken

## TAKE NOTE! Data cut as at Fri 7 Sept 2018 for:

- All Trading, Market Data and RTC **enablements** (Complds & RTC UserIDs)
- All **TraderIDs** and **TraderGroups**
- **Passwords** as at last Friday

## Mon 10 Sept

- Prep Environment
- Instrument reference data changes updated to align to Production

Password resets applied after 7 Sept 2018 will need to be re-done on Saturday, 15 Sept 2018

## Tues 11 Sept

## Wed 12 Sept

- Instrument reference data as at 7 Sep and then **updated to align to Production**
- Full position take-on as at 12 Sept 2018
- Only EDM and FXM member clients that have been active over the past 2 years will be migrated to new real-time clearing system

## Thur 13 Sept

- **IMPORTANT: Client CSV files will be available in the END-TO-END (ETE) folder on IDP**

- Instrument reference data changes with **instruments set to expire if applicable as per Prod**
- Members to verify positions against own systems
- **Test logins** and setup for trading, market data and real-time clearing to the Gateways
- **Test connectivity to Front-end / SIP** i.e. logon to your front-end before Saturday test

## Fri 14 Sept

- **IMPORTANT: Client CSV files will be available in the PRODUCTION folder on IDP**

In Progress



# Dress Rehearsal Testing – Issue Logging

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- Ensure clear issue logging procedure for your team
  - Ensure you have the **support helpdesk contact details of your software provider** for support during the dress rehearsals and log all software issues with them
  - **Log all queries with first line JSE Client Service Centre (CSC)** - via email to [CustomerSupport@jse.co.za](mailto:CustomerSupport@jse.co.za) or call us on +27 (11) 520 7777
  - Keep track of all actions in the event of a problem to assist with troubleshooting and to recreate the issue
- 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 CTS environment prior to the dress rehearsal if not already tested in ETE since last dress rehearsal

# Dress Rehearsal Schedule – 15 September 2018



- **Technical Teams**
  - **6h30 – 13h00** - technical teams be on site 6h30 – 7h00
  - **~11h30 – 12h00 Market Halt** – all automated trading will be halted for 10 mins and followed by a 5 min re-opening auction call in EQM & EDM (staggered and for applicable instruments) and straight into continuous trading for EDM (applicable instruments) and FXM (whole market)
  - **12h00 – 13h00** – Technical Gateway failover testing for trading and post-trade with software providers and own solution developers
- **Business Users**
  - **08h30 – 12h00** – Business users on site from 8h30 for start of trade reporting
  - **Note:** Should you require more time for testing, please notify CSC or your buddy on the day
  - **Attention Traders:** If you are not currently enabled to trade in a specific market YOU WILL NOT be able to conduct activity on the market e.g. if you are not currently a Currency Derivatives dealer you cannot trade currency derivatives
  - **Ensure realistic prices are used – make the test successful for everyone!**
- Monitor online status via this link:  
<https://www.jse.co.za/services/technologies/market-communications>
- Be aware of the JSE published known issue list as well as that of your software provider

# Dress Rehearsal Tracking – additional support



- Each JSE client has a dedicated JSE user readiness contact (“buddy”) – don’t know who your buddy is? Send an email to [ITaCBuddy@jse.co.za](mailto:ITaCBuddy@jse.co.za)
- Your JSE “buddy” will contact your nominated key ITaC contact person (primary/responsible officers) to exchange contact details (by Friday, 7 September 2018)
  - this person is your **escalation contact** (if required) during the dress rehearsals
  - If a **more senior escalation** contact is required, please contact Leanne Parsons, the JSE Executive Sponsor for ITaC via [LeanneP@jse.co.za](mailto:LeanneP@jse.co.za) or via Client Service Centre (CSC) +27 11 520 7777
- We will **reuse the SMS groups from the August** dress rehearsals – **IF YOU WISH TO AMEND CONTACTS** for your Firm, send an email to [ITaC@jse.co.za](mailto:ITaC@jse.co.za) with:
  - Firm Name
  - Name & Surname
  - Cell phone Number
  - Email Address

# Trade Reporting counterparty allocation

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- As indicated in the Trading test guide each Trading Member and each Clearing Member will be allocated two trade reporting counterparties for the dress rehearsal
- The intention is that clients are paired with counterparties that they deal with in a normal business day – should you have a preference please notify your buddy
- Counterparties will be allocated in any of these categories: Client, Broker or Bank
- Your JSE “buddy” will provide you with your counterparties for the dress rehearsal by Wed, 12 Sept 2018

- **PLEASE NOTE FOR TESTING IN DRESS REHEARSAL**
  - Invalid Trade Times – check that the time is populated correctly and regional settings and times are correct on the Front End
  - Trader IDs not authorised for market – use the correct Trader IDs for the correct markets
  - Trade Size and Quantity not correct
  - Incorrect Trade Types used – valid trade types indicated on next slide
  - Not populating the strategy link ID correctly – Roll Trade & Strategy Trade requires that the trade legs be linked and this ID must be the same for both trade legs

# Dress Rehearsal Trading Results Criteria



Pass mark is 85%  
for EDM & FXM

## Connectivity

| PASS RATE | Market  | Connectivity    |       |                  |       |                  |       |                |       |
|-----------|---------|-----------------|-------|------------------|-------|------------------|-------|----------------|-------|
|           |         | Native Trading  |       | Post Trade - Own |       | Post Trade - OBO |       | Drop Copy      |       |
| %         | EDM/FXM | Login All 3 GWs | Login | Login both GWs   | Login | Login both GWs   | Login | Login both GWs | Login |

## Trading – Order Management

| Submit New Order - TIF |     |     |     |     |     |     |     | Submit New Order - Type |     |     |      |            | Order Amend | Order Cancel | OOBD     |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-------------------------|-----|-----|------|------------|-------------|--------------|----------|
| OPG                    | DAY | FOK | GFA | GTC | GTD | GTT | IOC | LIMIT                   | MIT | MTL | STOP | STOP LIMIT | Amended     | Cancelled    | Recovery |

## Trading – On Book and Off Book Trades

| On Book Trades |    | Off Book Trades - Dual-Sided |    |    |    |    | Off Book Trades - Single-Sided |     |    |    |    | OBO | Cancellation |          | Strategy Trade |              | OTBD     |
|----------------|----|------------------------------|----|----|----|----|--------------------------------|-----|----|----|----|-----|--------------|----------|----------------|--------------|----------|
| UT             | AT | CD                           | NT | PA | RT | SR | CD                             | NT* | PA | RT | SR | NT  | On Book      | Off Book | ICS            | Delta Option | Recovery |

## Trading – Reference Data

| Permissions    |                         |  | Sessions/Status |  |                    | Instrument Creation |        |
|----------------|-------------------------|--|-----------------|--|--------------------|---------------------|--------|
| Correct Market | Correct Instrument Type |  | Suspend/Halt    |  | No trading session | Future              | Option |

\* Single Sided NT not applicable for FXM

NO AT MARKET ORDERS WILL BE ALLOWED & LIMIT ORDERS WILL BE MEASURED

# Dress Rehearsal Post-trade Results Criteria

JS=

15 September 2018 - Mandatory Market Dress Rehearsal

Firm Name:

## Post-trade Business Functional Test Worksheet

Instructions for completion of the Post-trade Business Functional Test Guide:

1. Trading Members and Clearing Members are required to complete **COLUMN D** of this document and indicate whether the function is applicable to the firm or not
2. Kindly submit completed test worksheets to your ITaC Dress Rehearsal Buddy by Monday, **17 September 2018**
3. Please note that the **pass criteria** for Post-trade activities is **80%** for the 15 September 2018 dress rehearsal

### TECHNICAL / FUNCTIONAL FEEDBACK

| # | Test Category   | Test Activity   | Is this function applicable to my firm? | Part of CM MMDR success criteria | Part of TM MMDR success criteria | Additional Information   |
|---|-----------------|---|---|----------------------------------|----------------------------------|--|
| 4 | Deal Management | Perform an Allocation to a Trading Member Client Main Account   |   | Yes                              | Yes                              | <p><b>YES = Min PASS criteria for TMs and CMs</b></p> <p><b>Pass mark is 80%</b></p> |
|   |                 | Perform an Allocation to a Branch Member Client Main Account  |   | Yes                              | Yes                              |  |
|   |                 | Initiate an Assign to a Trading Member  |   | Yes                              | Yes                              |  |
|   |                 | Accept an Assign from a Trading Member  |   | Yes                              | Yes                              |  |
|   |                 | Cancel an Assign to a Trading Member  |   | Yes                              | Yes                              |  |
|   |                 | Reject an Assign from a Trading Member  |   | Yes                              | Yes                              |  |
|   |                 | Initiate an Assign to a Trading Member Branch   |   | Yes                              | Yes                              |  |
|   |                 | Accept an Assign from a Trading Member Branch   |   | Yes                              | Yes                              |  |
|   |                 | Cancel an Assign to a Trading Member Branch   |   | Yes                              | Yes                              |  |
|   |                 | Reject an Assign from a Trading Member Branch   |   | Yes                              | Yes                              |  |
|   |                 | Perform a Tripartite allocation to a TM Client  |   | Yes                              | Yes                              |  |
|   |                 | Perform a Tripartite allocation to a Branch Client  |   | Yes                              | Yes                              |  |
|   |                 | Perform an Accumulation on a Trading Member House Account   |   | Yes                              | Yes                              |  |
|   |                 | Perform an Allocation Correction within a Trading Member  |   | Yes                              | Yes                              |  |
|   |                 | Perform an Allocation Correction within a Branch  |   | Yes                              | Yes                              |  |
|   |                 | Perform a deal sub-account modification between house accounts  |   | Yes                              | Yes                              |  |
|   |                 | Perform a deal sub-account modification between branch house accounts                                     |   | Yes                              | Yes                              |  |
|   |                 | Perform a principal correction from a Client Main Account to a Trading Member House Account               |   | Yes                              | Yes                              |  |
|   |                 | Perform a principal correction from a Branch Client Main Account to a Trading Member Branch House Account |   | Yes                              | Yes                              |  |

# Agenda

- ITaC Key Dates
- ITaC Market Dress Rehearsal 15 September 2018 Recap
  - Recap of objectives, approach and measurement criteria
- **End-To-End (ETE) Testing Status and Feedback**
  - EE Cycle 4
  - ETE Cycle 4A focused business events
  - ETE Cycle 5
- General
  - Monthly User Readiness report timeline for September
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# Status Update - ETE Testing Cycle 4: Week 2

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- **Statistics**

- Orders: 3 218 999 orders submitted
- Trades: 667 072 trades submitted
- Deals: 243 691 deals managed
- Non-Live Market Data Subscription Services: 467 Files produced

- **Highlights**

- Successful testing of FX and EDM closeouts in JSE Systems
- Successful testing of volume during End-to-End
- Failover testing of the Real-Time Clearing (RTC) member facing gateway required customers to connect on a different port – this will be addressed by the JSE to ensure a seamless failover for customers

# ETE Testing - Client Queries Overview



| End-to-End  | In Progress | Resolved | Total |
|-------------|-------------|----------|-------|
| Cycle 1     | 1           | 62       | 63    |
| Cycle 2     | 1           | 66       | 67    |
| Cycle 3     | 14          | 85       | 99    |
| Cycle 4     | 23          | 34       | 57    |
| Cycle 4A    | 3           | 1        | 4     |
| Grand Total | 42          | 248      | 290   |






| FUNCTIONAL AREA              | Status | Comment  |
|------------------------------|--------|--|
| Start of Day                 |        | Trading System is coming up in the morning, as scheduled and in a timely fashion. There are still known data alignment issues that do not affect start of day but require the JSE to manually manage the trading day as this is not production.  |
| Intra-Day                    |        | Uploads that occur intra-day are open interest and intra-day instrument uploads, these seem to be running well. We had to extend the market on the 30 <sup>th</sup> as MDS had issues related to FCO instruments.  |
| End of Day                   |        | The trading day has been extended to accommodate workarounds and processes for testing which is unlikely to happen in production. Further batch job automation required in test to ensure production behaviour is mirrored.  |
| Intraday instrument Creation |        | Instrument uploads that occur intra-day has been successful to date. We are receiving user created instruments as well. Some users have experienced an issue creating Delta Option, due to a known issue with their software provider.   |
| Order & Quote Management     |        | <p>No issues have been experienced in submission of orders/quotes. An auto-generated zero strike issue has been resolved. There are some market configuration changes being proposed i.e. no Market Orders.</p> <p><b>FXM:</b> Successful participation from 2 Banks in testing their Market Making application and the team is in the process of encouraging further Bank participation.</p> <p><b>EDM:</b> The team is in the process of engaging with members to test their Market Making applications. There has been successful participation from members during cycle 4. However the number of members participating has not increased since cycle 3 for both order and quote management. However, Dress Rehearsal testing has been at a sufficient level to counter these volumes.</p> |
| Trade Reporting              |        | Members who have participated have successfully passed most of the trade reporting test scenarios. The known issue from one software provider on Roll Trade functionality, which has been resolved and clients have the opportunity to retest this functionality. In ETE Cycle 5 and MMDR8.  |
| Connectivity and performance |        | Running on a third of the portion of CTS which is already half of production does not seem to be a problem. No system crashes, gateway downtime or excessive warnings. This indicates the production environment should cope even better.  |

| Issues                                 | Go to Green Action   |
|--|--|
| FXM Members' participation is moderate | Buddies to contact FXM Members to encourage active ETE Participation |
| EDM Members' participation is moderate | Buddies to contact EDM Members to encourage active ETE Participation |

# ETE Testing - Market Data



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| FUNCTIONAL AREA   | Status  | Comment   |
|---|---|---|
| Live Market Data Subscriber Testing                               |  | <ul style="list-style-type: none"><li>• 4 Live Information Subscribers currently participating</li><li>• No critical or high issues picked up during week.</li></ul>  |
| Non Live Market Data Subscriber Testing                           |  | <ul style="list-style-type: none"><li>• No critical or high issues picked up during week 2.</li></ul>   |
| Non Live Market Data – Web Reports for general public consumption |  | <ul style="list-style-type: none"><li>• Publication of test reports to test website on TB75 environment will be checked during week of 03/09</li><li>• Publication of FXM MTM All report still to be placed on TB75 website for review.</li></ul> |

# ETE Testing - Clearing



ISE

| FUNCTIONAL AREA  | Status | Comment   |
|--|--------|---|
| Daily Balancing (IM, VM, Dividend payments, Funding Interest and Fees)     |        | Balancing progressing well however trading engine cancel trade scenario has resulted in out of balance scenarios on IM, VM and fees. JSE is working with GCMS software provider to resolve for Cycle 5. |
| Corporate Actions  |        | Successful processing of a Full Conversion Corporate Action   |
| Deal and Position Management and Commissions (Trading Members)             |        | Increased participation – no issues reported with regards to Deal Management functionality.   |
| Trade Reporting, Deal & Position Management and Commissions (On Behalf Of) |        | No issues reported.<br>Focused commissions testing post end of Cycle 4 (04 to 07 September 2018)  |
| Futures Close Out (Equity Derivatives)                                     |        | No issues in JSE systems.<br>Known issues regarding processing of FCO deals in GCMS and will be resolved in next code drop.   |
| Currencies Market Expiration Day   |        | Process ran smoothly from a JSE perspective.<br>Known issues regarding processing of FCO deals GCMS and will be resolved in next code drop.   |
| Intraday Instrument Management / Intraday Reference data changes           |        | Successful retesting of member transfer as well as additional margin updates.<br>Successful testing of re run scenario on the back of margin changes as well as testing of 0 margin values.             |

| Issues  | Go to Green Action                          |
|---|---|
| Clearing Member Software – key issues related to ETE run plan <ul style="list-style-type: none"> <li>- Closeout and corporate action deals processing</li> <li>- Outstanding report fixes, Scheduler bugs, Internal accounting balancing</li> </ul>   | GCMS code drop delivered on 31 August 2018. |
| Clearing Member Software <ul style="list-style-type: none"> <li>- Cancelled trades quantity issue resulting in out of balance scenarios</li> <li>- Change required to align risk fee calculation to JSE method</li> <li>- Include month end interest to balance as part of last business day of the month</li> <li>- Retesting of client transfers within same Clearing Member</li> </ul> | GCMS code drop to resolve TBA               |
| JSE – key issues <ul style="list-style-type: none"> <li>- Consult market on Corporate Action processing methodology in ITaC</li> <li>- Provision test of post midnight GCMS / RTC downloads</li> <li>- Retesting of all complex Corporate Action scenarios</li> <li>- Retesting of month end interest and risk fees</li> </ul>  | To be tested as part of Cycle 5             |

# End-To-End Testing – Focused tests

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- From **4 Sep to 7 Sep 2018**, JSE held **focussed test to facilitate additional testing** of the following **specific business events**:-
  - Scenarios for end-to-end processing of commissions including across software providers
  - Dual-sided trade reporting across different software providers
  - Scenarios for allocation and assigns including across software providers
  - Clients that wish to participate must notify their buddies to ensure we include them in the communication
- Clearing Members, Trading Members and Software providers participated
- Tests proved to be extremely valuable in identifying issues with cross software provider functionality / compatibility
- Assisted in troubleshooting key issues identified during previous dress rehearsals and ETE tests

# End-To-End Focused Tests - Lessons Learnt



- Strategy Trades and Roll Trades
  - Traders to make use of a correct reference in the “**Strategy Link ID**” (this **needs to be the same for both legs** of the off book trades)
  - Software providers to confirm how they have catered for this in their frontends
- Off book trade types
  - Software providers to ensure they only include valid Off Book trade types in their drop down lists as is configured in the trading system – use daily reference data files
- Trades were rejected due to an invalid trade time
  - Software providers to verify their system time and ensure they are in sync with JSE trading system time
- Traders to ensure that:
  - A valid price and size are entered (trades were rejected due to zero price or quantity)
  - Only use Trader IDs for the instruments and/or markets that it is enabled for
- Trade Cancellations
  - Cancellation will only be processed by JSE systems once BOTH counterparty cancellation requests are submitted

# End-To-End Focused Tests - Lessons Learnt

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- Commissions
  - Invalid commission references
  - Invalid client references
  - Not processing commissions correctly nor populating reference fields correctly for trade cancellations
  - One software provider was not using the latest specification and needs to make changes



# End-To-End (ETE) Testing - Cycle 5



Start Date: 17 September 2018

End Date: 1 October 2018

| Basic Events Scope                   | Specific Events Scope   |
|--------------------------------------|---|
| Order Management                     | Users to create intra day instruments   |
| Trade Execution - On Book & Off Book | Month End – 30 September 2018   |
| Options Exercised & Abandoned        | EDM Multiple FCOs & FXM Multiple Expiries   |
| Deal Management                      | Tripartites   |
|                                      | Corporate Actions <ul style="list-style-type: none"> <li>- Basic</li> <li>- Complex</li> </ul>  |
|                                      | Public Holiday 24 September 2018  |
|                                      | FXM market making obligations (daily)   |
|                                      | Decommissioning impact on remaining markets (daily)   |
|                                      | Member and client transfers (on request to JSE ClearOps team)   |
|                                      | Clearing EOD re runs: <ul style="list-style-type: none"> <li>• CM1 balancing and at CM2 balancing</li> <li>• On FCO</li> <li>• T+1</li> </ul> |
|                                      | Default Management  |
|                                      | Business Continuity Scenarios e.g. market halt & gateway failover   |

## Agenda

- ITaC Key Dates
- ITaC Market Dress Rehearsal 15 September 2018 Recap
  - Recap of objectives, approach and measurement criteria
- End-To-End (ETE) Testing Status and Feedback
  - ETE Cycle 4
  - ETE Cycle 4A focused business events
  - ETE Cycle 5
- **General**
  - **Monthly User Readiness report timeline for September**
- Questions?

Remember that your September User readiness reports **are due** on Friday, **14 September 2018**

- If you have not previously submitted a checklist - kindly remember to do so
- **Who can assist me in understand the checklist?**
  - Please contact your JSE buddy for assistance
- **Who needs to submit this?**
  - Trading and Clearing Members and Information Subscribers

# Questions?



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



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