



Integrated Trading & Clearing (ITaC)

Dress Rehearsal Feedback and Briefing

19 April 2018



Agenda

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- March Dress Rehearsal Results
- ITaC Project Status Update
 - Mandatory Clearing Member Testing (MCMT)
 - Non-Live Market Data User Acceptance Testing
- May Mandatory Market Dress Rehearsals
- High Level Timelines and Key Dates
- General
- Questions?



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March Dress Rehearsal Results



- March Dress Rehearsal had mixed results across various market participants
- Some clients experienced connectivity issues during the test and whilst the majority of these issues were resolved, certain clients only resolved these very late in the test
- Functionality issues and various configuration/set-up concerns were highlighted as well
- Some clients were unfamiliar with the process to verify information via front-ends, highlighting the need for additional client training by their software providers
- Some dress rehearsal functional test worksheet feedback forms are still outstanding
- Consolidation and preparation of dress rehearsal results reports took longer than anticipated and will be distributed by your "buddy"
- Reports are based on transactions as extracted from the trading, market data and real-time clearing systems at the end of the dress rehearsal
- Results have been derived on the minimum set of criteria however we have included the full set of criteria for future dress rehearsals



March Dress Rehearsal Results

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- Dress Rehearsal Results Reports are ready
- March results % Met is derived on this minimum set of criteria
- Full set of functional and technical test criteria measurements included for completeness
- Minimum March dress rehearsal test measurement criteria, column headings are highlighted in RED text

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

				TRADE MANAGEMENT												
0	n		Off Book			Off Book Trades -			ОВО	Cance	llation	St	rategy	OTBD		
Book Trades		des	- Du	ıal-	Single-Sided							1	rade			
Tra	Trades		Sided													
UT	AT	CD	NT	RT	SR	CD	NT	PA	RT	SR	NT	On	Off	ICS	Delta	Recovery
												Book	Book		Option	

INSTRUMENT MANAGEMENT							
Peri	missions	Session	s/Status	Instrument Creation			
Correct Market	Correct Instrument Type	Suspen d/Halt	No trading session	Future	Option		

	ORDER MANAGEMENT															
Submit New Order - TIF				Submit New Order - Type			Order	Order	OOBD	Quotes						
									Amend	Cancel						
OPG	DAY	FOK	GFA	GTC	GTD	GTT	IOC	MARKET	MIT	MTL	STOP	STOP	Amended	Cancelled	Recovery	Added
												LIMIT				
									l							



Overall Dress Rehearsal Results for March



 Average (not weighted) Trading Member results across both EDM and FXM – both technical and functional results

Market	Connectivity					
Market	Native Trading	Post Trade - Own	Drop Copy			
EDM / FXM	Login	Login	Login			
	81%	82%	73%			

ORDER MANAGEMENT						
Submit New	Order - TIF	Submit New Order - Type	Order Amend	Order Cancel	OOBD	
DAY	GTD	MARKET	Amended	Cancelled	Recovery	
59%	8%	24%	37%	37%	5%	

TRADE MANAGEMENT					
On Book Trades	Off Book Trades - Dual-Sided	Off Book Trades - Single-Sided			
AT	NT	NT	On Book	Off Book	Recovery
58%	16%	20%	0%	4%	11%



^{*} Includes all trading members even if not active

Overall Dress Rehearsal Results for March



- Average Post-trade (deal management) results for Trading Members only
- March results % Met is derived on this minimum set of criteria which will be revised for the next dress rehearsal

Trade feed into RTC	Receive Trades in RTC for all participants	100%
	Accumulate	55%
	Allocate	35%
	Allocate Correction	25%
51	Assigned	44%
Deal	Option Exercise	13%
management	Modify Position Sub Account (if used by clients)	10%
	Position Abandon	6%
	Principal Correction (if used by clients)	6%
	Trade Sub Account Mod (if used by clients)	28%
	Tripartite Assign (if used by clients)	13%
	New Commission	18%
Commissions	Cancel Commission	10%
	Reject Commission	10%



^{*} Includes all trading members even if not active or deal management outsourced to clearing member

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Client Meetings



To effectively manage client readiness leading up to go-live, the following has been implemented:

- One on one client meetings on request
- Client briefing in Cape Town next week Tues, 24 April 2018 at 11h00
- London client briefing and client visits in week of 21 May 2018
- Client forums have been scheduled to kick off from 2 May 2018 as follows:

	Project Management Forum	Client Forum
Start Date	Wednesday, 2 May 2018 09h30 – 11h00 - Fortnightly thereafter	Wednesday, 9 May 2018 09h30 – 11h00 - Fortnightly thereafter
Target audience	Project Managers or Responsible Officers involved in ITaC	All clients directly involved and impacted by ITaC
Objectives	Provide regular status feedback, discuss readiness progress and engage on issues or upcoming milestones	Market briefing sessions, training, topic-focused workshops, etc.
Attendance	Optional but we are encouraging clients to attend. Software providers will be mandated to attend these meetings.	Optional unless otherwise specified. Software providers will also be in attendance at these meetings.



ITaC Project Status Update



Mandatory Clearing Member Testing (MCMT)

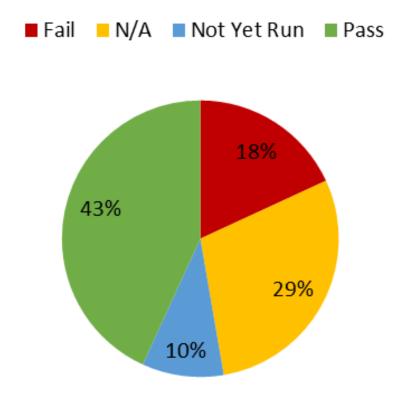
- An ITaC testing "Task Force" has been constituted, comprising of Clearing Members, STT and JSE resources
- Task Team will work together on the testing and resolution of any issues experienced in the clearing software solution and address these collectively, utilising an agile-type methodology, while Task Team members are hosted at the JSE's offices
- Having adopted this new approach, MCMT iteration 3 was successfully kicked-off on 3 April
- Planning of subsequent iterations is in progress which includes the market wide end to end testing that involves trading members and other software providers



Clearing Member Testing Execution Report



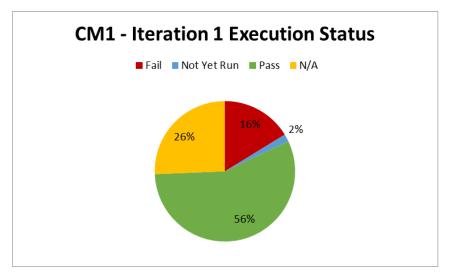
Total - Iteration 1 Execution Status

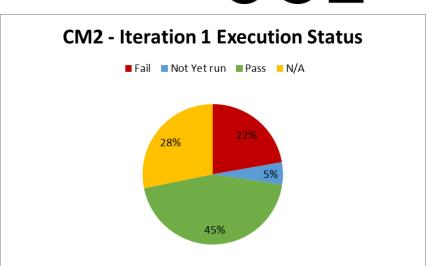


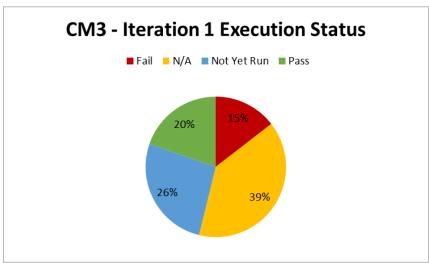


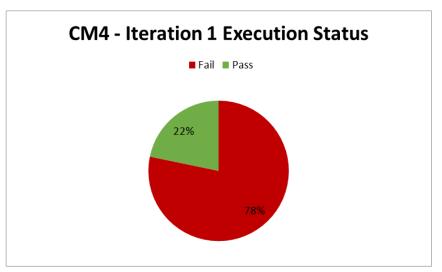
Clearing Member Testing Execution Report







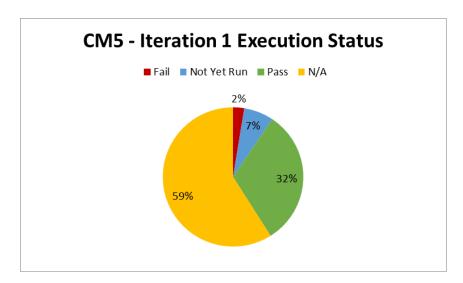


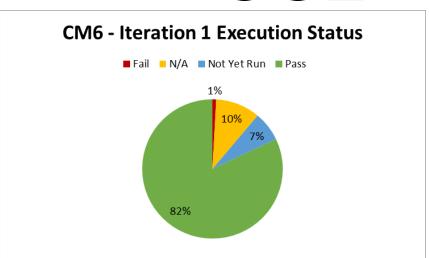


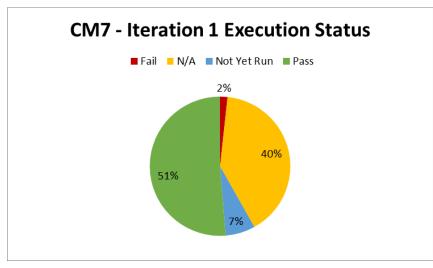


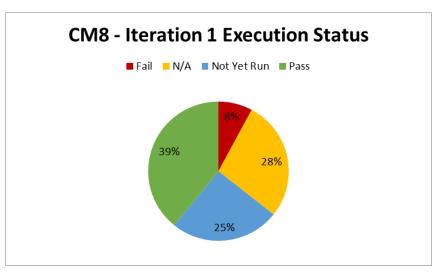
Clearing Member Testing Execution Report













ITaC Project Status Update



Non-Live Market Data User Acceptance Testing

- Non-Live Market Data User Acceptance Test (NLMD UAT) commenced successfully on 12 March
 2018 and good progress is being made by clients testing
- Approx. 30 clients are actively testing with us the testing is assisting clients to understand the new
 production data records as well as identifying issues and areas requiring further education
- To assists clients in proving their access to the new ITaC Non-Live Market Data records as NLMD UAT closely mirrors the way that users will access the data in production
- NLMD UAT was due to conclude on Friday, 20 April 2018, however at the request we have extended this availability to 1 June 2018 who wish to conduct further testing
- ATTENTION all website report users if you have not already done so, complete impact analysis of the non-live market data reports currently available on the JSE website that you are dependent on
- JSE strongly encourages all clients that directly access any non-live market data to take up this
 opportunity to test in the NLMD UT environment to ensure readiness for go-live



ITaC MCMT Status Update



progress

MCMT Draft Milestones – each subject to success of prior milestones	Date
MCMT iteration 3 currently in progress	03 Apr – 20 Apr 2018 WIP
Code deploy	23 Apr 2018
MCMT iteration 4	24 Apr – 3 May 2018
Code deploy	7 May 2018
Dress rehearsal preparation	8 – 11 May 2018
Mandatory Market Dress Rehearsal	12 May 2018
Remaining iterations	TBC Additional
	MCMT test planning is in

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Mandatory Market Facing Dress Rehearsals (MMDR)



Measuring Success of Dress Rehearsals



- Feedback from clients to simplify the dress rehearsal functional test worksheets:
 - Separate business functionality test criteria for business users from technical test criteria for technical teams and software providers/Shared Infrastructure Providers (SIPs)
 - Conduct technical failover tests only once all functional tests are complete
 - Clients must indicate what business functionality is used so that measurements are adjusted for these only

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

Deal Management

Connectivity and authentication

Perform deal management activities e.g. Assign, allocate, tripartite etc.

Capture service fees

View positions

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.

Clearing

Receive and process trades

Perform deal management activities e.g. assign, allocate, tripartite

Capture service fees

View positions

Verify booking fees

Verify margins

Participation in Dress Rehearsals – 12 May 2018



- This dress rehearsal is Mandatory for:
 - All Trading Members that participate in the Equity Derivatives and Currency Derivatives markets regardless of how they access JSE trading and post trade services (test all applicable solutions)
 - All software providers (trading, deal management and clearing)
 - All Shared Infrastructure Providers (SIPs)
 - Clearing Members
 - Real-time Information subscribers that connect directly to the JSE (for ITaC EDM and FXM services)
 - International Access Point clients subscribing directly to the JSE (for ITaC EDM and FXM services)
- Non Live Market Data subscribers do not participate in the dress rehearsal as they are participating in Non-Live Market Data User Acceptance Testing



Participation in Dress Rehearsals – 12 May 2018



- All JSE user credentials required for go-live
 - New Firm credentials
 - New Trader IDs (including automated trading applications), Trader Groups and Branches
 - New Trading and Market Data Gateway Comp IDs
 - Real-Time Clearing User-ids
 - Information Delivery Portal (IDP) credentials
- Please ensure you have appropriate business representatives on site including relevant traders to signoff functionality and verify correct authorisation in JSE systems and your software Front -ends
- JSE production and pre-production environments will be available 4 days prior to the dress rehearsal to assist TECHNICAL teams, software providers and Shared Infrastructure Providers (SIPs) as follows:
 - 8 and 9 May prove technical login connectivity as well as configuration setup
 - 10 and 11 May prove minimum end to end message flow per member firm (limit testing to one instrument for 1 or 2 accounts)
 - 12 May 2018 functional and technical dress rehearsal testing with a full Clearing end of day run



Dress rehearsal preparations



- Verify all software configuration and setup prior to the dress rehearsal including Trader IDs, Trader Groups, Branches, etc. – if you're unsure confirm with your software provider or Shared Infrastructure Provider (SIP)
- Trader ID file download to assist with automated setup of client system to avoid manual capture and configuration errors
- Attend training on your front-end functionality with your software providers prior to the dress rehearsal
- Test your required business functionality in the Customer test Service (CTS) environment prior to the dress rehearsal. CTS can be used for testing 98% of functionality
- Only production instrument data will be used
- 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
 - First line JSE support is the Client Service Centre log all queries via email to <u>CustomerSupport@jse.co.za</u> or call us on (011) 520 7777
 - Keep track of all actions in the event of a problem to assist with troubleshooting and to recreate the issue



Dress Rehearsal – 12 May 2018



- Test runs between 6h30 12h00 technical teams be on site 6h30 7h00
- Business users on site from 8am for start of trade reporting if you run out of time and need more time – please notify CSC or your buddy on the day
- Monitor dress rehearsal status via this link:

https://www.jse.co.za/services/technologies/market-communications

- Attention Traders: If you are not currently enabled to access a specific market YOU WILL NOT be
 able to access it during dress rehearsals. E.g. if you are not currently a Currency Derivatives dealer
 you cannot trade currency derivatives
- Clearing back office staff will have a TraderID for every trading member that they clear for and it should be tested
- Enablement requests/amendments cut-off date is next Tuesday, 24 April 2018
- Be aware of the JSE published known issue list as well as that of your software provider



Mandatory Market Dress Rehearsal

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TAKE NOTE!

- 3 May 2018 is the data cut:
 - For all Trading, Market Data and RTC enablements
 - For production instrument reference data
 - For full position take-on for the dress rehearsal Members to verify positions against own systems
 - Only EDM and FXM member clients that have been active over the past 2 years will be migrated to new real-time clearing for the dress rehearsal
 - Reference data for the dress rehearsal will not change

8 – 9 May 2018

- Test logins and setup for trading, market data and real-time clearing
- Verify position balances

10-11 May 2018

- TRADERS must test their connectivity to their SIP i.e. logon to your front-end before Saturday test
- Prove end to end connectivity limit to 1 or 2 messages to prove end to end flow



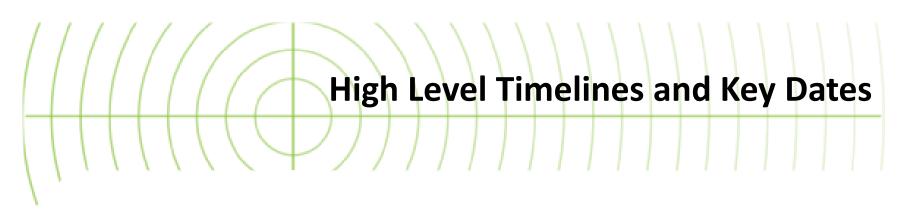
Dress Rehearsal Tracking



- Each JSE client has a dedicated JSE user readiness contact ("buddy") don't know who your buddy is? Send an email to ITaC@jse.co.za
- Your JSE "buddy" will contact your nominated key ITaC contact person (primary/responsible officers) to exchange contact details (by Thurs 22 March)
 - 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 or via Client Service Centre (CSC) +27 11 520 7777
- Monitor status updates via SMS to amend any SMS contacts:
 - Send email to ITaC@jse.co.za by Friday, 4 May 2018 with:
 - Firm Name
 - Name & Surname
 - Cell phone Number
 - Email Address
- JSE will require your completed dress rehearsal functional test worksheet from the ITaC
 Responsible Officer to confirm results of the dress rehearsal email these to ITaC@jse.co.za



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ITaC Timeline Update



- Planning of subsequent MCMT iterations is in progress which includes the market wide end to end testing that involves trading members and other software providers
- JSE has commenced engagement with stakeholders on the targeted go-live date and this will be confirmed as soon as it is available
- Remaining JSE activities including regression testing, final defect resolution, decommissioning testing, performance testing, and most importantly training is in progress – project moving from a deployment phase into final operational readiness and proving
- Indicative timelines for the next steps for the roll-out of the collateral system are currently being discussed with key stakeholders e.g. trading members, clearing members, Strate, CSDPs, etc.



ITaC Key Dates

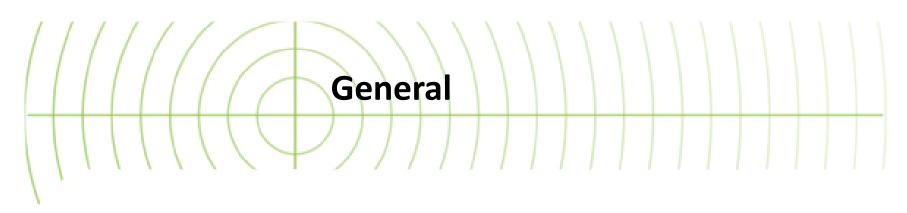
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Date	Milestone
24 Mar 2018	Mandatory Market Dress Rehearsal 3
12 May 2018	Mandatory Market Dress Rehearsal 4 (8-11 May is prep time)
26 May 2018	Optional Market Dress Rehearsal
1 Jun 2018	End of Non-Live Market Data (NLMD) user acceptance testing (extended from 20 April 2018 at the request of clients)
9 Jun 2018	Mandatory Market Dress Rehearsal
ТВС	Targeted Go-Live Date (JSE in consultation with key stakeholders to agree revised targeted Go-Live date)
Additional Test C	Opportunities
Mid May 2018	Start of market end to end testing alongside MCMT with clearing members
19 May 2018	Participant Test Weekend (PTW) optional for additional client testing for trading as required
30 Jun 2018	Participant Test Weekend (PTW) optional for additional client testing for trading as required

- Trading and Clearing Members and real-time market data subscribers **must** successfully pass 2 mandatory dress rehearsals to go-live
- CTS is still available for trading & clearing and covers 98% of functionality
 - JSE early deployment opportunities being finalised as most of our new solutions are ready



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General

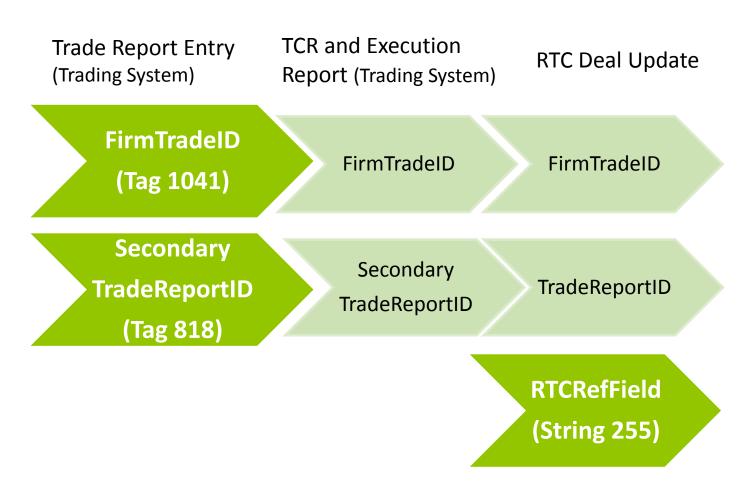


Secondary client order reference ID

- During Mandatory Clearing Member testing, a requirement was raised for members to be able to identify and tie back internal reference fields to clients for deal management purposes
- A new field 'Secondary Trade Report ID' is being added to the 'New Order', 'Order Cancel/Replace Request' and 'Execution Report' messages of the Native Enhanced Gateway
- Will be a 'non mandatory' field of length 10 and data type 'alphanumeric'
- On a successful trade execution, values submitted in the new field will be disseminated via the 'Secondary Trade Report ID' field on the Native Execution Report and SecondaryTradeReportID (818) field on the Trade Capture Report message of the Post Trade Gateway
- 'Secondary Trade Report ID' will not be populated for trade cancellations
- This field will be published via the Drop Copy Gateway feed
- 'Secondary Trade Report ID' field will be mapped to the existing 'Trade Report ID' in the JSE Real-time Clearing Solution
- If you require further clarity, speak to your software provider to confirm how this is implemented

Off Book - Existing







Off Book Mapping - Existing



Current	ITaC
Reference #1	FirmTradeID (11)
Reference #2	SecondaryTradeReportID (10)
Branch	SecondaryFirmTradeID (10)
	RTCRefField (255)

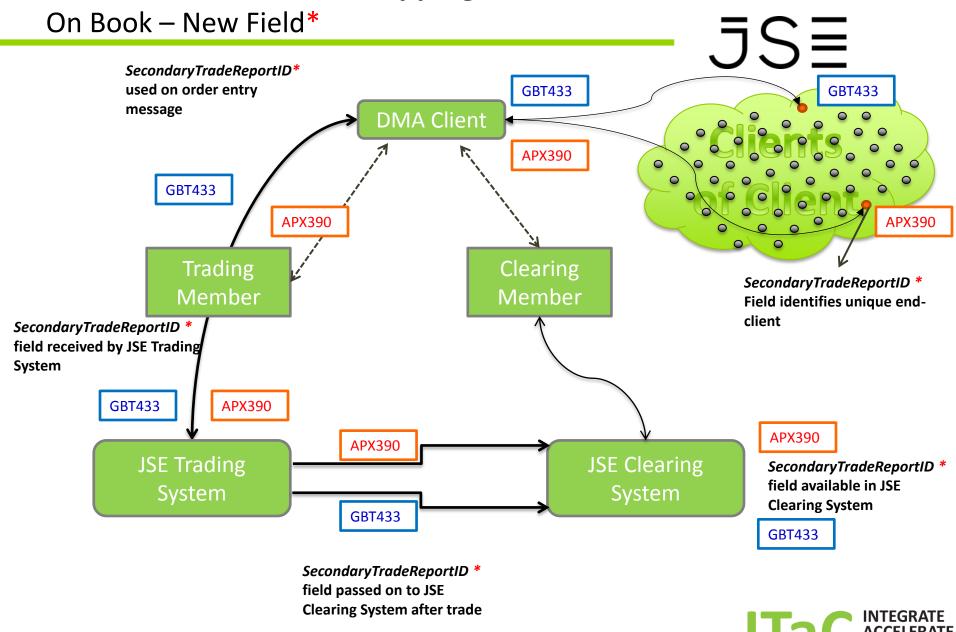
FirmTradeID - Mandatory free text field

SecondaryTradeReportID – Optional free text field

SecondaryFirmTradeID - Optional field can be used for counterparty branch information can be used tor counterparty branch information

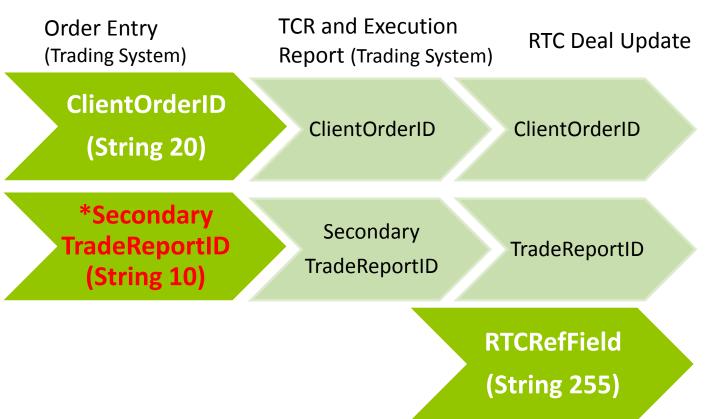
RTCRefField - Optional free text field on deal management activity





On Book – New Field*





SecondaryTradeReportID – free-text field where the details of the end-client can be entered

RTCRefField - Optional free-text field on deal management activity



General



- Mark-to-Market data for purposes of marketing by trading members to clients
 - JSE will provide mark-to-market data in an excel spreadsheet
 - Data will be 5 days old with access for a 30 day period
 - Not for daily operational use but rather to assist members when engaging with new clients requesting closing price information for modelling/feasibility of trading
- JSE is doing some end to end mapping of business processes to assist clients in understanding how certain business practices may be impacted by ITaC



Questions?

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



CustomerSupport@jse.co.za



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