

Integrated Trading and Clearing (ITaC) Client Forum

6 March 2019



• ITaC High Level Timeline and Key Dates

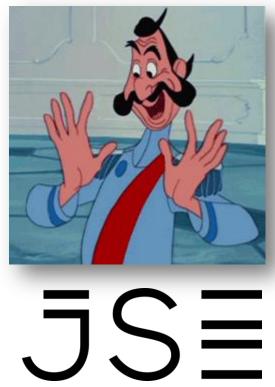
- 9 March Mandatory Dress Rehearsal
- ITaC Project Go Live Support Overview
- Client Forum Topics
- Questions?



Tac INTEGRATE ACCELERATE GROW

Project ITaC Count Down

As at 6 March 2019 22 business days to Go Live on 8 April 2019



High Level ITaC Timeline

JS≣ **NOV 2018 DEC 2018 JAN 2019 FEB 2019 MAR 2019 APR 2019** 5-12 -19-26-3-10-17-24-31-7-14-21-28-4-11-18-25-4 11-18-25-1-15-22-29-8-12 7 22 29 5 19 26 9 16 23 30 14 21 28 11 18 25 8 15 22 1 15 3 4 1 Key Go live bedding down Milestone Go Live 5/11 RTC, **DRs & Deployments** 8 Apr VIS Go-Live RTC CIS Int. **Dry Run** Ext. Deploy Deploy 2 9Mar 9Feb MMDR MMDR12 MMDR11 Int. 10 daily **EXT dailv** MMIDR OMDR MMDR prod Prep Prep prod run Prep run **ETE Cycle 8 Scripted** ETE ETE JSE support for CM Data incl decommissioning Cycle 9 **Final Cycle** internal testing refr testing Scripted Scripted **Client Readiness ETE Testing & CM Downstream & Integration** JSE ETE environment available Testing Final Final Conceptual Conceptual CM CM Training Training **Project** Code Code **Break** CM CM Drop Drop Code drop Code drop **Rules** Rules Approval Gazetted **Rules formal** Other consultation ETW PTW ETW PTW **PTW** We are here

ITaC Key Dates

ITaC Key L	
	JSE
Date	Milestone
1 Mar 2019	Trader ID freeze start
4 – 8 Mar 2019	Dress Rehearsal Prep (ETE not available) We are here
9 Mar 2019	Mandatory Market Dress Rehearsal FINAL DRESS REHEARSAL
11 – 12 Mar 2019	Existing JSE ETE environment available
16 Mar 2019	JSE internal deploy of VIS & RTC into production (not available to clients)
18 Mar 2019	New JSE ETE environment available
25 Mar 2019	Final approval of rules
25 Mar – 5 Apr 2019	RTC in production available to clients External Production Daily Run (daily reference data alignment)
27 Mar 2019	ITaC Client Forum (rescheduled to this date due to FCO 20 Mar) Go live cutover expectations, activities and support
5 Apr 2019	JSE EXCO Go live decision
6 – 8 Apr 2019	Go Live Weekend and Final cut-over activities
8 April 2019	Go Live Date
15 Apr 2019	Trader ID freeze end
6 May 2019	Enablement change freeze end

Enablement Freeze Period

- Enablement change freeze is now in effect
- 6 May 2019 Enablement change freeze end (could be earlier if bedding down period smooth)

Conformance

- Final software conformance by software providers or own solution developers completed 28 February 2019
- Thank you for your cooperation in this regard!



Trader ID Freeze Period

- Cut off date for Trader ID applications or amendments was Tuesday, 26 February 2019
- Any new/amended Trader ID must be tested in at least one dress rehearsal so if it was not tested on 9 Feb it must be tested on 9 Mar
- 15 Apr 2019 TraderID freeze end

Go Live Bedding Down Period

• 8 Apr – 3 May 2019



JS≡

- ITaC High Level Timeline and Key Dates
- 9 March Mandatory Dress Rehearsal recap
- ITaC Project Go Live Support Overview
- Client Forum Topics
- Questions?



Reminder Dress Rehearsal Participation Requirements

- 9 March 2019 Final Client Go Live Dress Rehearsal
- Mandatory for the Equity Derivative and Currency Derivatives markets:

Trading Members	Clearing Members	Live Information Subscribers
Mandatory for all Traders	Mandatory for operations staff	Mandatory for operations staff
Compliance Officer to provide written confirmation to JSE that all Traders have tested	Clearing Member to provide written confirmation that operations staff have tested	Live Info Subscribers to provide written confirmation that they have tested
Testing must not be conducted by		
Shared Infrastructure Provider		

Shared Infrastructure Providers, Service & Software Providers

All operational and helpdesk support staff to assist their clients with functionality, processes and issue troubleshooting and resolution

JSE

• The key objective of the ITaC dress rehearsal is to simulate as closely as possible a live production business day in the production environments of the ITaC solutions

JS≡

- The **9 March 2019** dress rehearsals is for <u>clients</u> to:
 - Test your final solution and front-end configuration, setup, readiness and robustness
 - Final opportunity for Traders and other operational back office staff to familiarise themselves with their front-ends in a live environment using close to live data
 - PLEASE USE REALISTIC PRICES AND NUMBER OF CONTRACTS TRADED
 - Conduct final go live readiness checks and build confidence in your teams to prepare for go live
 - **Practice go live cutover activities** as they will happen on the cut-over weekend
 - **Practice the sign-off** of positions, margin balances and reference data take on as it will be on go live

As the focus of this test is for client's own testing - no JSE test checklists will be published and no test checklists need to be returned to the JSE! (except for new/changed enablements)

> The JSE will not produce results reports (except for new/changed enablements)

Lead Up To Dress Rehearsal – 9 March 2019

				•	JSE
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		Market Da	ments for Trading, ta and RTC Ds and TraderGroups	1 Production Data cut as at COB	2
4	5	6	7	8	9 Dress rehearsal prep
Dress rehearsal preparations			Technical connectivity proving from ~midday on Thursday		continues ~8am publish <u>FINAL</u> CSV files, mapping spreadsheet and EDM & FXM Friday EOD
Environment and Instrument reference data preparation NO CONNECTIVITY AVAILABLE		~12h00 <u>draft</u> CSV reference data files and mapping spreadsheet	~22h00 start dress rehearsal data migration activities	Closing Price spreadsheet 09h00 – 12h00 CM Data verification & signoff to JSE	
TraderID CS	V files availabl	e daily in prod IDF	published member folders		11h00 – 12h00 TM Data verification and signoff to JSE
RTC password Only EDM & created after	FXM member cl 1 Jan 2019 will b	on Thurs & Fri will N ients that have been e migrated to new R	to be re-done on Saturda OT need to be re-done of n active over the past 2 y eal-Time Clearing system rsal and be available on N	Saturday ears as well as accounts	12h00 – 14h30 Dress Rehearsal client testing execution 14h30 – ~18h00 EOD and CM Balancing & Reports

Date	Time	Description	To Action
	Go li	ve Dry Run - Preparation, Batch Runs and Data Ta	ke-on
Thu, 07 Mar 2019	JSE to notify time	Trading and Real-Time Clearing connectivity can be confirmed and TraderID files available	CMs, TMs & IS
Fri, 08 Mar 2019	~ 10:00	Draft Client CSV files and TraderID files issued	CMs, TMs & IS receive and process
Fri, 08 Mar 2019	18:00 - 00:00	JSE Production Batch runs (all services)	JSE
Sat, 09 Mar 2019	00:01 - 08:30	JSE ITaC Data Take-on from Nutron and internal verification	JSE (see <u>guidance note</u>)
09 Mar 2019	~ 04:30	JSE issues Final Client CSV files and TraderID files	CMs, TMs & IS receive and process when they are ready to
09 Mar 2019	09:00 - 12:00	Clearing Member data verification activities*	CMs to verify data take-on & submit data verification signoff
09 Mar 2019	09:30 – 12:00	Connectivity to Trading, Market Data and Clearing GWs available	CMs, TMs & IS to connect when ready at any time during this period
09 Mar 2019	11:00 - 12:00	Trading Member data verification activities*	TMs to verify data take-on & submit data verification signoff
09 Mar 2019	12:00	 Dress Rehearsal testing to commence as per Test Schedule: Mandatory for Trading and Clearing Members Mandatory testing for Info Subscribers 	CMs, TMs & IS

¹² * <u>Click here to download the data verification signoff sheet to submit to JSE prior to end of the dress rehearsal</u>

JS≣

ACCELERATI

Date	Time	Description	To Action			
	Dress Rehearsal Activities					
	12:00 – 14:15	EDM & FXM Off Book Trade Reporting Period	CMs, TMs to commence trade reporting and Deal Mgmt Information subscribers to receive and process Market Data			
	12:20 - 12:30	EDM Opening Auction				
09 Mar 2019	12:30 - 14:15	EDM & FXM Continuous Trading Period	Orders, Trades, Deal Mgmt, Clearing and Market			
2015	12:30 - 12:45	Order Rate Volume Period	Data published			
	13:30 – 14:15	Trading Gateway Failover (TBC on day depending on client request)				
	14:15 – 14:30	EDM & FXM Post Close Period	Order deletion, GTT orders are expired, manage Off Book trades. No order matching and Closing Prices published			
	14:15 - 14:30	EDM & FXD – EOD Deal & Position Management period	CMs, TMs to perform Deal Mgmt activities			
	14:30 onwards	Conduct EOD Dress Rehearsal	JSE, CMs			
	Post EOD	Test ends and clients commence data clean-up JSE produces NLMD products	REMINDER: Roll back to as at Post EOD 8 Mar 2019			

All times are approx and quoted in **South African Standard Time (SAST = GMT+2)**

Member Data Verification Sign-off NB!! 9 Mar 2019 $\overline{,}5 \equiv$

- Trading and Clearing Members are required to sign off on the account, opening positions and collateral (margin) balances take-on performed by the JSE as part of the final ITaC go live weekend activities on 5-6 April 2019
- In order to ensure that members are familiar with the go live data migration process signoff of data take-on will also be **required on the dress rehearsal (9 March 2019)**
- This form needs to be signed and submitted to the JSE by the appropriate responsible representative(s) within the Trading or Clearing Member firm prior to the end of the dress rehearsal(s)

Take-on data to be signed off includes:

- 1. Sub Accounts
- 2. Client Accounts and Tripartites
- 3. Positions
- 4. Cash accounts (Member cash accounts and foreign clients)
- 5. Additional margin setups
- 6. Cash collateral balances (Clearing Members only)

NB: To understand DATA MIGRATION PROCESS AND TAKE-ON RULES view the Guidance Note ITaC Guidance Note on Data take-on for EDM and FXM.pdf



Trading and Clearing Member Sign-off

NAME OF TRADING / CLEARING MEMBER: NAME OF AUTHORISED REPRESENTATIVE:					
	REPRESENTATIVE:	/ / / / / / / / / / / / / / / / / / / /			
DATE: SIGNATURE:		/ / 2019			Click here
DATA TO BE VERIFIED	VERIFICATION BY	DESCRIPTION	VERIFIED	COMMENTS (IF NECESSARY)	to downloa Signoff shee
Cash Collateral Balances	Clearing Members Only	Verify cash collateral balances at a member and client level			0
Positions	Trading and Clearing Members	Verify position take-on at member and client level			Click and complete
Position Accounts	Trading and Clearing Members	Verify take-on of position accounts including member and client sub accounts			signoff Sheet to ITaC@jst
Clients	Trading and Clearing Members	Verify member client take-on			
Tripartite Agreements	Trading and Clearing Members	Verify tripartite take-on			
Cash Accounts (Member and Foreign Clients)	Trading and Clearing Members	Verify cash accounts loaded for members and member clients			
Additional Margin Setup	Trading and Clearing Members	Verify any additional margin requirements			

Dress Rehearsal Documents

- All dress rehearsal documentation is available on the ITaC webpage:
 - <u>https://www.jse.co.za/services/itac#OtherDocumentation</u>
 - Test schedule and period times
 - Data verification signoff sheet
 - Instrument Mapping Spreadsheet
 - Derivatives instrument closing price file (as at COB Fri, 8 March 2019)
- Dress rehearsal schedules:
 - Mandatory Market Facing Dress Rehearsal Trading Schedule.pdf
 - Mandatory Market Facing Dress Rehearsal Post-trade Schedule.pdf
- Checklist for new or changed enablements that need a dress rehearsal pass:
 - Dress Rehearsal Trading Functional Test Guide EDM FXM MMDR 2019
 - Post-trade Dress Rehearsal Functional Test Worksheet 2019.xlsx



For New or Changed Enablements ONLY!

JS≣

 Dress rehearsal results will be generated only for all new/changed ENABLEMENTS based on transaction data in JSE systems at a CompID level – retain your system logs

Trading Business Functional Test Guide	Post-trade Checklist		
DO NOT need to be completed & returned to the JSE	Must be completed and returned to the JSE by Trading and Clearing Members		
All functionality highlighted in Yellow is mandatory	Mandatory functionality identified by column "Part of MMDR Success criteria"		
 Pass mark depends on each Gateway at a CompID level 	• Pass mark is 80%		
Confirm what business functionality is not applicable to your firm			



- Monitor online status via this link:
 - https://www.jse.co.za/services/technologies/market-communications
- Passwords
 - Trading, Market Data and Real-Time Clearing Gateway passwords will be as at close of business 1 Mar 2019
- Trader IDs
 - **Compliance Officers are required to ensure full participation** by Traders of the member firm
 - Clearing Members to ensure participation of required operational staff
- Counterparty Pairing
 - The JSE will <u>not</u> pair clients with counterparties for testing clients to engage with counterparties as they do
 during a normal trading day
- JSE Buddy
 - Your JSE buddy will engage with you before the dress rehearsal so that you are aware of who to contact should you need to escalate an issue
- Issue logging
 - Ensure you log all dress rehearsal issues experienced with your software provider
 - For JSE queries contact first line support <u>CustomerSupport@jse.co.za</u> or +27 (11) 520 7777
 - Keep track of all actions in the event of a problem to assist with troubleshooting and to recreate the issue



JS≣

Key objectives for Trading Members

- Trading Members to Verify Trading Member and Client Positions in ITaC solutions
 - Verify all Nutron position data (as at close of business on Friday, 8 March 2019) has been correctly converted into ITaC on 9 Mar 2019
 - Verify positions at a principle level per tradable instrument
 - Check positions stored at Trading Member and Trading Member sub account level
 - Check positions at client and client sub account level (if applicable)
- Reference Data Accounts
 - Check all active member and branch sub accounts have been correctly converted into your ITaC solution
 - Check all active member clients and client sub accounts (if applicable) have been correctly converted
 - Check all accounts loaded from 1 January 2019 (even if not active) have been correctly converted
 - Check branches (if applicable) have been correctly converted
- Other Trading Reference Data
 - Verify contract codes and other trading reference data (as at close of business on Friday, 8 March 2019) has been correctly converted into ITaC on 9 Mar 2019
 - Verify all closing prices as provided in the prices file from the JSE as well as published in real-time feed
 - Practice JSE sign off requirements and submit data verification sign off to JSE on 9 Mar 2019 before the end of the Dress Rehearsal



JS≣

Key objectives for Clearing Members

- JSE Data Take-on Process
 - Post the production Nutron EOD batch on Friday evening, 8 March 2019 the JSE will commence the data take-on process to convert/carry over all Nutron data (contracts, member and client accounts as well as open positions etc.) to the new ITaC solutions
- Clearing Members to Verify Trading Member Positions in ITaC
 - Verify positions at a principle level per tradable instrument
 - Verify cash collateral take-on balances
 - Verify member branches and member clients take-on
- Test all On-Behalf-Of Trade Reporting and Deal Management (where this is part of normal business operations)
- Test all Clearing functionality
- Practice JSE sign off requirements and submit data verification sign off to JSE on 9 Mar 2019 before the end of the Dress Rehearsal
- EOD balancing will be run at the end of the test and Clearing Members will produce reports



Reminder Market Dress Rehearsal 9 March 2019 55≡

Key objectives for Information Subscribers

- JSE Data Take-on Process ٠
 - Post the production Nutron EOD batch on Friday evening 8 March 2019 the JSE will commence the • data take-on process to convert/carry over all Nuclears market data (contracts and closing prices) to the new ITaC services
- Information Subscribers to Verify Reference Data in ITaC ۲
 - Verify reference data (as at close of business on Friday, 8 March 2019) has been correctly converted ٠ into ITaC on 9 Mar 2019. This verification should include Contract Codes
 - Verify all closing prices as provided in the prices file from the JSE as well as published in real-time ٠ feed
- Live Market Data subscribers
 - Provide written confirmation that testing was conducted ٠
- Non Live Market Data subscribers ۲
 - We will produce the JSE NLMD files for Equity Derivatives and Currency Derivatives market as part of ٠ this dress rehearsal and will notify clients once these are available for download



- ITaC High Level Timeline and Key Dates
- 9 March Mandatory Dress Rehearsal
- ITaC Project Go Live Support Overview
- Client Forum Topics
- Questions?



Non Live Market Data Post 9 March

JS≣

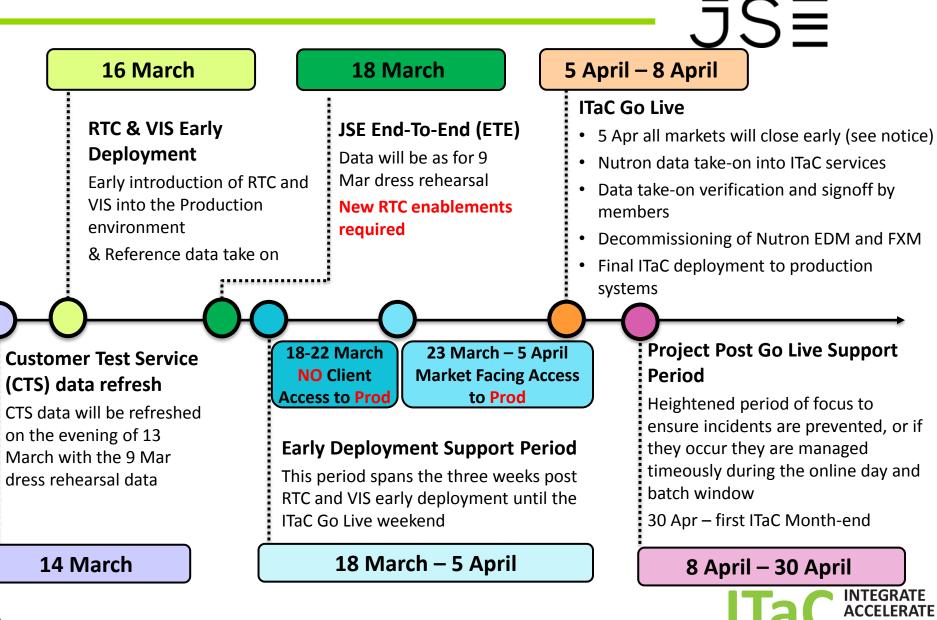
- Non Live Market Data subscribers
 - PLEASE NOTE THE FOLLOWING:
 - NLMD client test files will be produced on Saturday 9 Mar and placed in the standard ETE test folder \Members\Member XXX\NLMD ETE\. These will be daily, weekly and monthly data records.
 - As ETE is available for 11 & 12 March, the JSE will produce client files for these days
 - From 13 March all client test files produced thus far during ETE testing will be moved to a backup sub-folder within the NLMD ETE folder
 - This is to ensure that the files are not deleted and are available for client testing up until go live
 - Any late requests from new clients that have not previously participated in ETE to access a set of **sample test data records** will be referred to the following links below:

Equity Derivatives Data Records.zip

Currency Derivatives Data Records.zip



Key ITaC Milestones coming up



When

- Data refresh on evening of 13 March
- Preparation activities will take place 11 13 March

5 Customer Test Service (CTS) data refresh CTS data will be refreshed on the evening of 13 March with the 9 Mar dress rehearsal data

What

- Data in the Customer Test Service (CTS) will be refreshed post dress rehearsal
- **CTS will close at 16h00** SAST **on 13 March** for the refresh activities to take place

14 March



When

- Deployment to take place on weekend of 16 March
- Preparation activities will take place during the week leading up to 16 March

16 March RTC & VIS Early Deployment Early introduction of RTC and VIS into the Production

 $\vec{} =$

& Reference data take on

environment

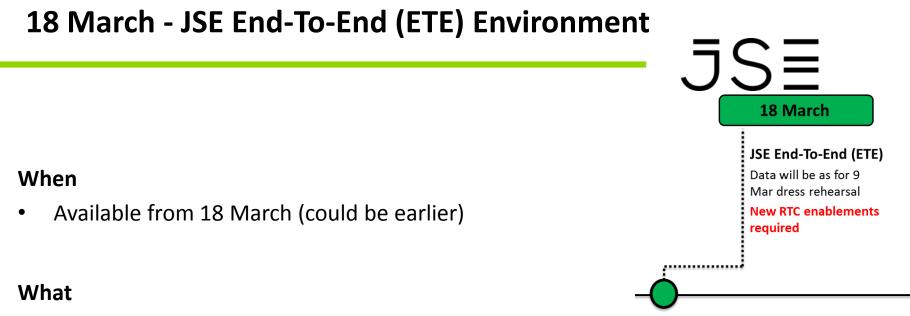
What

 Early introduction of Real-Time Clearing (RTC) and Valuations Information

System (VIS) into the JSE Production environment

- Reference data take on of
 - Member Client accounts and Position accounts
 - Instruments





- Data will be refreshed as per 9 March MMDR from 18 March and thereafter data will be as per testing conducted by clients
- Data on **8 April** will be refreshed to mirror production and thereafter data will be as per testing conducted by clients and will be refreshed on an adhoc basis
- Existing Trading enablements for ETE remain
- New enablements for RTC need to be submitted via standard process through CSC
- ETE environment will remain as the fully integrated environment available for testing post go live of ITaC

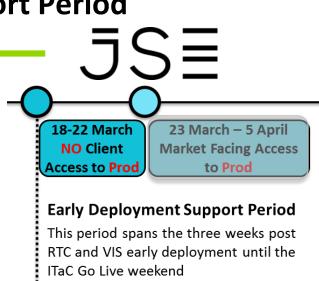


18 to 22 March – Early Deployment Support Period

When

What

• Period spans the three weeks post RTC and VIS deployment until the ITaC Go Live weekend



18 March – 5 April

• 18 - 22 March

- Internal prep, monitoring and Early Deployment Support period post RTC and VIS deployment on 16 March
- NO ACCESS to RTC Prod for clients
- ACCESS to Trading and Market Data Prod Gateways to prove connectivity/LCON

However the EDM/FXM markets are suspended i.e. not up and therefore no realtime reference data published from Trading System

• Daily Instrument reference data alignment between JSE systems from 18-22 March



25 March to 5 April – Early Deployment Support Period

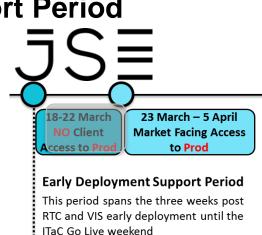
When

Period spans the three weeks post RTC and VIS deployment until the ITaC go Live weekend

What

29

- 25 Mar 5 Apr
 - Heightened period of focus during online day and batch window
 - ACCESS to Trading and Market Data Prod Gateways to prove connectivity/LCON
 - EDM/FXM markets are suspended i.e. not up and therefore no real-time reference data published from the Trading System
 - ACCESS to RTC Prod for clients enabled Passwords will be reset, clients MUST login and change these
 - Clients can login to prove connectivity/LCON to RTC prod
 - Clients can subscribe to real-time RTC reference data
 - Alignment between JSE systems from 25 March 5 April
 - Daily alignment of instruments in Nutron and ITaC i.e. each day, all instrument reference data created in Nutron will be captured into ITaC systems
 - Daily publication of prices via RTC (from JSE pricing system) at snapshot intervals during the day and then EOD (will be some differences to current Nutron)
 - Weekly alignment of client accounts between Nutron and ITaC i.e. every Friday evening, all client accounts captured or maintained in Nutron will be migrated into ITaC systems based on data take-on rules
 - Daily Instrument mapping spreadsheet will be published ITaC webpage www.jse.co.za\services\itac#OtherDocumentation
 - Daily Client CSV files (trading reference data) will be published via IDP folder \Derivatives Market Prod folder



18 March – 5 April

5 April to 8 April – ITaC Go Live

<u>JS</u>≣

5 April – 8 April

ITaC Go-live

- 5 Apr all markets will close early (see notice)
- Nutron data take-on into ITaC services
- Data take-on verification and signoff by members
- Decommissioning of Nutron EDM and FXM
- Final ITaC deployment to production systems

When

- Activities pertaining to Go Live commence on 5 April and will largely be completed on 6 April, with some completing during batch run on 8 April
- Decision on closing all JSE markets earlier (except Bond ETP) being considered by ITaC Market Steering Committee on 6 Mar
- 44 responses received on JSE consultation with Trading Members, Clearing Members, Asset Managers and information subscribers

What

- Client account, positions and collateral balances data take-on as at close of business 5 April
- Decommissioning of EDM and FXM Derivatives markets
- Final deployment of ITaC changes to production systems
- Member data take-on verification and signoff
- Client connectivity tests (live connectivity tests) to all ITaC Services
 - Trading and Market Data
 - RTC
 - Information Delivery Portal (IDP)





• Heightened period of focus on ensuring incidents are prevented or if they occur they are managed timeously during the online day and batch window



- ITaC High Level Timeline and Key Dates
- 9 March Mandatory Dress Rehearsal
- ITaC Project Go Live Support Overview
- Client Forum Topics
- Questions?



Client Forum originally scheduled for 20 March (FCO day) has been RESCHEDULED TO 27 March 2019

Date	Session Topics for Discussion
27 March 2019 (PLEASE NOTE the revised date of this forum)	 Post early deployment support model update Go Live cutover and deployment preparation Go Live update Go Live support briefing
3 April 2019	Final Go Live Briefing



- ITaC High Level Timeline and Key Dates
- 9 March Mandatory Dress Rehearsal
- ITaC Project Go Live Support Overview
- Client Forum Topics
- Questions?



Questions?

JS≣



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



CustomerSupport@jse.co.za

