

Integrated Trading and Clearing (ITaC) Client Forum

27 March 2019



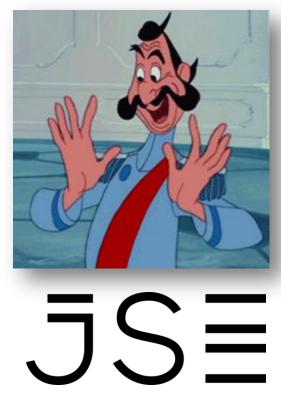
• ITaC High Level Timeline and Key Dates

- 9 March Dress Rehearsal Feedback
- Participant Test Weekend (PTW) 30 March 2019
- Early Deployment Support Model Update
- Go-live cutover, Deployment and Support
- Client Forum Topics
- Questions

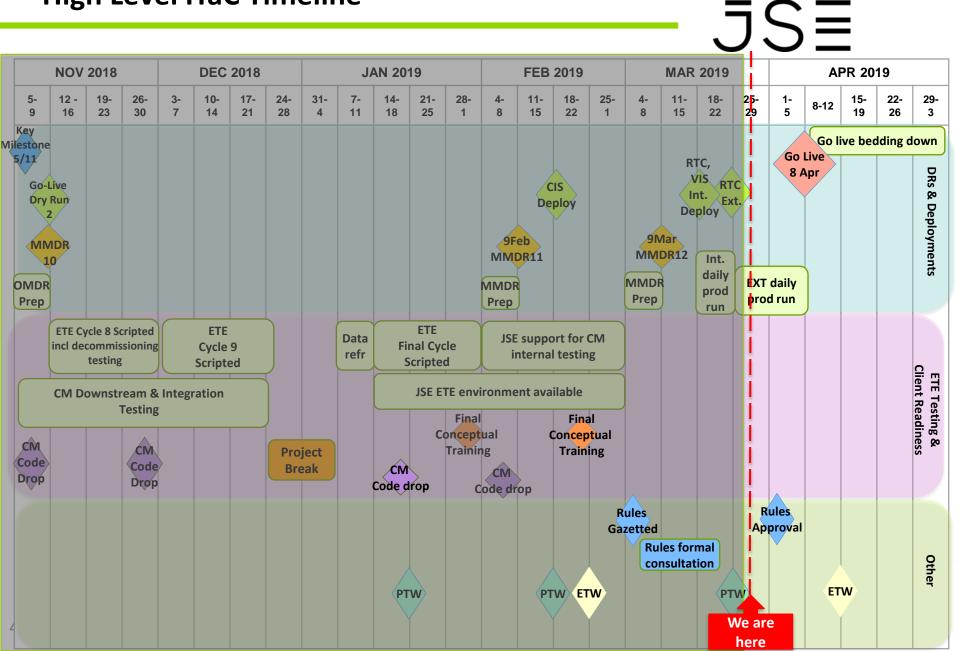


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Project ITaC Count Down As at 27 March 2019 8 business days to Go Live on 8 April 2019



High Level ITaC Timeline



ITaC Key Dates

Date	Milestone		
1 Mar 2019	Trader ID freeze start		
4 – 8 Mar 2019	Dress Rehearsal Prep (ETE not available)		
9 Mar 2019	Mandatory Market 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)		
30 March 2019	Participant Test Weekend (Including Equity Derivatives & Currency Derivatives)		
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)

Trader ID Freeze Period

- 28 Mar 2019 Cut off date for any final trader <u>deletions</u> prior to go live (no new Trader Ids can be added for EDM & FXM in ITac
- 15 Apr 2019 TraderID freeze end

Go Live Bedding Down Period

• 8 Apr – 3 May 2019



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9 March Dress Rehearsal Feedback

- End of day balancing All IM & VM balanced across 7 clearing members. Remaining clearing member had internal data issues
- JSE produced NLMD files on 11 March 2019
- Delays in the JSE's take on activities had a knock on impact to the start of the Dress Rehearsal
 - SIPs did not have sufficient time to synchronize systems to JSE prior to Traders starting to test this particularly impacted 2 SIPs' clients
- RTC Password resets
 - Clients that successfully connected and changed their passwords on 8 March 2019 weren't unable to connect immediately on the morning of 9 March 2019 due to the JSE resetting passwords and not communicating this to clients on the day. CSC assisted all clients on the day but this also impacted SIPs being ready for their clients to connect
- User Created Instruments created during the dress rehearsal before the JSE extended the trading sessions continued to follow the original default trading sessions and not the extended trading sessions
 - Post go live, in the unlikely event that the JSE needs to extend trading session, the business process has been updated to ensure these are also extended. A post go live fix will be implemented to automatically adjust these instruments
- Clearing Member go live methodology of the take on of cash collateral needed to be changed and was successfully tested
- Some clients still not aware of front end functionality and certain process changes clients are encouraged to test in ETE Staging Environment and/or PTW on 30 March 2019



9 March Dress Rehearsal Feedback

- Position Take on
 - Issue identified where positions that needed to be loaded on a cash settled Dividend Neutral, were loaded on the equivalent physically settled Dividend Neutral due to required reference data not taken on
 - Only 11 positions were impacted across all positions taken on Members were notified on the day
 - JSE also tested a fix on the day so that should this occur on go live it can be rectified
 - The take on has been successfully retested and confirmed as resolved
- Volatility Auctions Triggered
 - 54 Circuit breaker breaches 12 on the main ALSI March expiry and 13 on the ALSI June expiry due to Traders not using prices that were in line with production prices
- Balancing on Fees by Clearing Members
 - Cancelled trades that also had deal management performed on them are automatically zero feed for all deal managed legs linked to the original trade by Clearing Member solution. The JSE did not invoke the business process to manually zero fee these trades on the MMDR – this business process will be in place for go live and the JSE has changed its billing system to replicate the clearing member system
- Balancing on Commissions by Clearing Members
 - Clearing Member software changed (delivered 20 March) to cater for where a commission is duplicated (i.e. all commission details are identical except for the commission ID). As per the business process that has been communicated, if clients correct commissions they must cancel the first commission and then generate a new commission
 - Clearing member software changed (delivered 20 March) to cater for additional scenario where a dual sided reported trade is booked between two members where there is an underlying client on the one side



- ITaC High Level Timeline and Key Dates
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- What is a PTW?
 - A Participant Test weekend (PTW) is an opportunity for clients to test their solutions/systems in a production environment out of office hours
 - In the past, PTWs were available monthly for the Equity Market services
 - The following standard activities form part of a standard PTW test weekend:
 - Live Connectivity Test (LCON) is MANDATORY AND SUPPORTED for new customers or additional enablements being introduced for existing JSE clients
 - Unscripted testing this testing is OPTIONAL AND UNSUPPORTED for existing JSE clients who would like to do their own in-house testing in the production environment
 - Post ITaC go live, PTW's will be available for EQM, EDM and FXM Trading, Market Data and RTC services



Participant Test Weekend (PTW) - 30 March 2019

- March PTW extended to include ITaC Equity Derivatives (EDM) and Currency Derivatives (FXM) markets
- Standard EQM production schedule, EDM and FXM production Trading and Clearing schedule as follows:

	Start Of Trading	Opening Auction Call	Continuous Trading	Post Close
EDM	07:00 - 08:15	08:15 - 08:30	08:30 - 17:30	17:30 - 18:30
FXM	07:00 - 09:00		09:00 - 17:00	17:00 - 18:30
EDM / FXM Trade Reporting	08:00 - 18:30			
EDM / FXM Deal Mgmt	08:00 - 18:30			

- NOTE: EDM & FXM Instrument reference data, member client account and position account information will be as at close of business on Friday, 29 March 2019 No EDM and FXM positions will be available
- **NOTE:** Constraints of the PTW environment for EDM and FXM:
 - Users can create user created instruments intra-day and trade on these, **however** no deal management will be possible, as these **will not feed through to other downstream systems and RTC**
 - **No open interest** will be published as the integration layer will not be available

Morning	Afternoon
08h00 – 12h00 - Onsite JSE Supported	12h00 – 17h00 - Offsite Unsupported
Test any/all functionality that you need to	Clients may continue to test any/all functionality that they
prove/test	wish to test

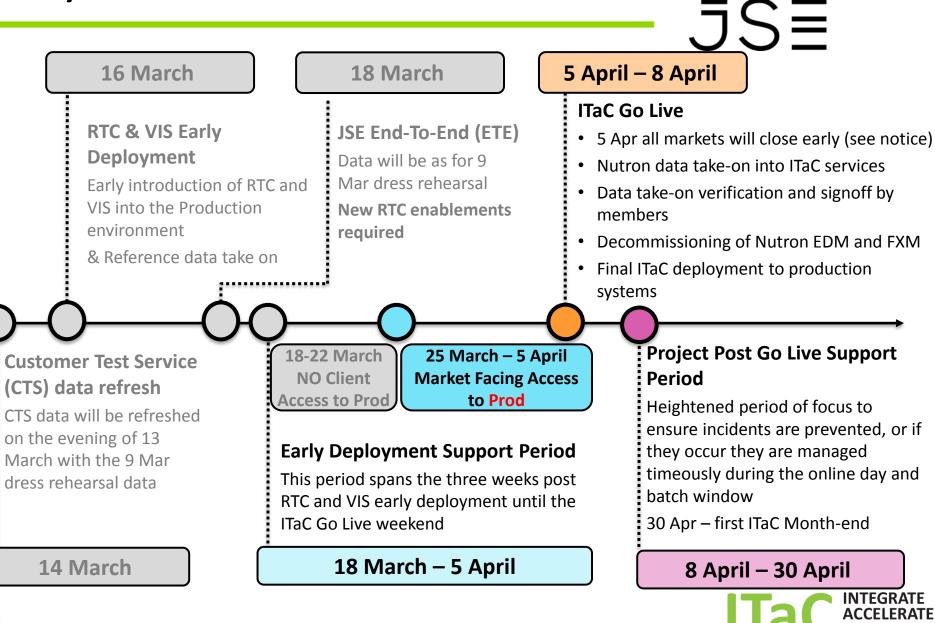
- To participate:
 - Contact your Shared Infrastructure Provider (if necessary) and
 - Notify the JSE via CSC on +27115207777 or CustomerSupport@jse.co.za



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Key ITaC Milestones



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
Please note: Production

What

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- 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

credentials and IP addresses are

applicable for this environment

- 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 on the 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

18-22 March NO Client Access to Prod Early Deployment Support Period This period spans the three weeks post RTC and VIS early deployment until the ITaC Go Live weekend

18 March – 5 April

25 March to 5 April – Early Deployment Support Period

Communication

 Monitor exception communication at the following link: <u>https://www.jse.co.za/services/itac-communications-page</u> A general client call will be scheduled if and when necessary

Verify Reference Data and report any issues to your software provider and then CSC if they confirm it is a JSE issue

JSE 18-22 March NO Client Access to Prod Early Deployment Support Period This period spans the three weeks post RTC and VIS early deployment until the ITaC Go Live weekend 18 March – 5 April

Issue Logging to JSE

- Ensure clear issue logging procedure for your team
 - Ensure you have the support helpdesk contact details of your software provider/Shared Infrastructure Provider (SIP) for support
 - Log all software issues with your software/SIP provider not the JSE
 - Log all queries confirmed to be JSE issues with JSE Client Service Centre (CSC) via email to <u>CustomerSupport@jse.co.za</u> or telephone +27 (11) 520 7777
 - During this early deployment period when reporting issues to JSE provide the following details:
 - Market affected in subject line EDM or FXM
 - Issue category in subject line e.g. Reference Data, Connectivity to Trading, Connectivity to RTC, NLMD, etc
 - Firm name and contact of person logging the issue
 - Description of issue/query

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5 April to 8 April – ITaC Go Live

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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
- All JSE markets closing earlier on 5 April 2019 (except Bond ETP)

What

- Positions and collateral balances data take-on as at close of business 5 April
- Final client account take on (client accounts loaded in Nutron from 1-5 Apr)
- Decommissioning of EDM and FXM Derivatives markets
- Final deployment of ITaC changes to production systems
- Member (Trading and Clearing) 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)



Go-live Weekend – 8 April 2019

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Thurs	Fri	Sat	Sun	Mon
4 Should have proved connectivity to your SIP and the JSE	5 JSE EXCO Go/No Go Decision All markets closing earlier – see <u>Notice 74B</u>	6 Cut-over continues ~6am publish <u>FINAL</u> CSV files, mapping spreadsheet and EDM & FXM Friday EOD Closing Price spreadsheet JSE BACKUPS 9h00 – 12h00	7	8 06h00 Technical on site early support Normal Market Start
e.g. Traders MUST login to their new front-end to confirm credentials	Derivative Market batches and EOD balancing to run earlier Other JSE services normal batch	SIPs & Directly connected TMs Login to Trading and RTC and align data to JSE 9h00 – 12h00 CMs Login to Trading and RTC and align data to JSE		for all JSE Markets as per trading schedules
in place	JSE BACKUPS ~18h00 start cut-over and	12h00 – 15h00 CM Data verification and signoff to JSE	Busine	ess Users Onsite
	data migration take-on activities for ITaC Nutron EDM and FXM Decommissioning activities commence	12h00 – 15h00 TM Data verification and signoff to JSE		ess Users Onsite
		JSE go live confirmation to clients		times SAST and approx.

Member Data Verification Sign-off NB!! 6 Apr 2019 $5 \equiv 5 \equiv$

- On Saturday 6 April, Trading and Clearing Members must provide 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
- This form needs to be **signed and submitted to the JSE by the appropriate responsible representative(s)** within the Trading or Clearing Member firm

Note: All data verification queries need to be logged with CSC and be resolved on Saturday, 6 April 2019 during the data verification period. Do not forget to submit sign-off sheets to JSE ASAP on 6 April

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@jse
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			

• Live Information Subscribers

- Verify reference data (as at close of business on Friday, 5 April 2019) has been correctly converted into ITaC. This verification should include Contract Codes. This can be checked using the Start of Day reference data CSV files.
- Review the final old/new mapping spreadsheet provided by the JSE.
- Verify all closing prices as provided in the prices file from the JSE as well as published in real-time feed.

• Non-Live Information Subscribers

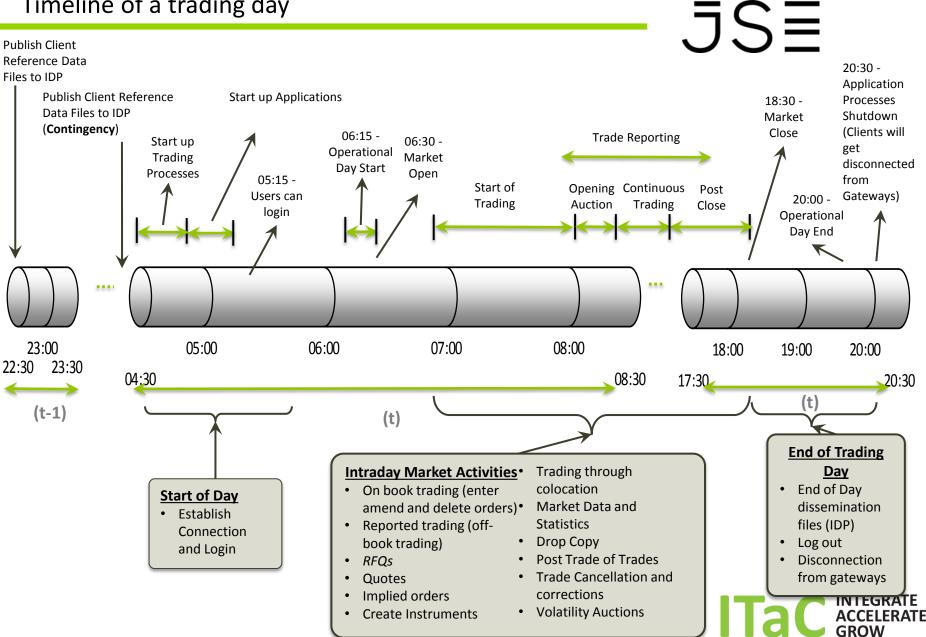
- Verify reference data (as at close of business on Friday, 5 April 2019) has been correctly converted into ITaC. This verification should include Contract Codes.
- JSE will provide details on final data record subscription set in week of 1 April. Verify back to JSE in that week that the data record subscription set is correct for production.
- Verify in week of 1 April that access to the new NLMD production folder is working.
- On weekend of go-live, verify that all new/changed data file processing routines are in place to point to new Edxx.zip data files via new production folder and not to current website reports/files and/or current data records.
- For subscribers that process current IRC data records for Interest Rate Derivatives data, verify that these routines will continue to process current IR.zip data file but excluding Currency Derivatives data.



Daily Trading Lifecycle

Timeline of a trading day

23



EDM Trading System Reminders

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1. Trading Sessions

- New "Start of Trading" session
- Opening Auction extended by 5 min

2. Order Types

- Enabled for Go Live: Limit Orders and Stop Limit Orders
- **Disabled** for Go Live: Market Orders, Stop Orders, Market if Touched and Market to Limit orders

3. Trade Types

- AT (On Book) Automated Trade
- UT (On Book) Uncrossing Trade
- NT (Off Book) Negotiated Trade
- SR (Off Book) Strategy Trade
- RT (Off Book) Roll Trade
- CD (Off Book) CFD Trade

4. Circuit Breaker Levels triggering volatility auctions – On Book

- Index Futures: 5% (Static); 1% (Dynamic)
- SSFs: 8% (Static); 4% (Dynamic)



EDM Trading System Reminders (cont.)

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5. Price Bands – Off Book

- Price Band: 4%
- The price bands do not limit the matching of Off Book trades that may breach the thresholds set
- Trading Members and Clearing Members involved will be notified via a flag on the trade message if the price band has been breached.
- 6. Implied Order Creation
 - Enabled for Go Live: Implied "In" and "Out"
 - Disabled for Go Live; Implied "Across"
- 7. Published volatility on off book SSF and Index Option trades
 - Thresholds no longer applicable as all trade information (including the volatilities) is published via the trading market data gateways.

Nutron Decommissioning

- EDM will no longer be accessible on Nutron post ITaC go live on 8 April 2019
- **Day 1**: Members will still be able to log into Nutron but will not be able to perform any trading functions i.e. will only be able to access download files applicable for the previous trading day (Print/Transfer)
- **Day 2**: Members will still be able to log into Nutron, but will not be able to access or download any of the files, via the print/transfer functionality

FXM Trading System Reminders

1. Trading Sessions

- New "Start of Trading" session
 - 07h00 08h00 View open orders, view expired orders
 - 08h00 18h30: Trade reporting
- Extended closing time of the deal management and trade reporting session to 18h30

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- 2. Order Types
 - **Enabled** for Go Live: *Limit Orders and Stop Limit Orders*

3. Trade Types

- AT (On Book) Automated Trade
- NT (Off Book) Negotiated Trade
- SR (Off Book) Strategy Trade
- RT (Off Book) Roll Trade

4. Price Bands – On Book

- This is the tolerance defined as a percentage in relation to the Static Reference Price (previous days closing price)
- These limit entry of an order (order rejected) as well as an amended order that may breach the threshold that has been set in the trading system
- Price Band: 8%

5. Price Bands – Off Book

- Price Band: 4%
- The price bands do not limit the matching of Off Book trades that may breach the thresholds set
- Trading Members and Clearing Members involved will be notified via a flag on the trade message if the price band has been breached.
- Trades will be accepted and Clearing Member notified

6. Implied Order Creation

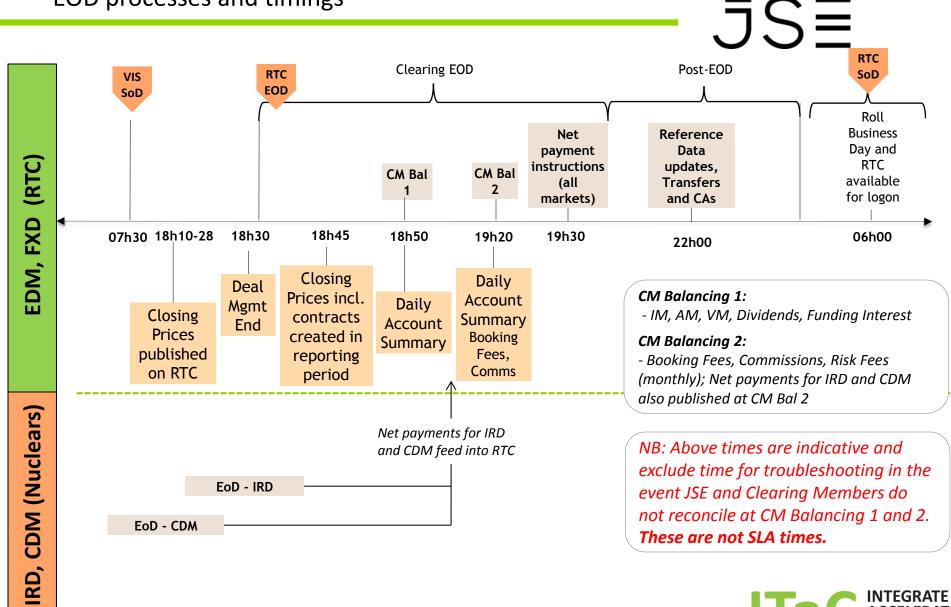
- Enabled for Go Live: Implied "In" and "Out"
- **Disabled** for Go Live; Implied "Across" (across different calendar spreads)

Nutron Decommissioning

- The Currency Derivatives Market will no longer be accessible on Nutron post ITaC go live on 8 April 2019
- **Day 1**: Members will still be able to log into Nutron but will not be able to perform any trading functions i.e. will only be able to access download files applicable for the previous trading day (Print/Transfer)
- **Day 2**: Members will still be able to log into Nutron, but will not be able to access or download any of the files, via the print/transfer functionality

Clearing EOD Processes

EOD processes and timings



Summary Production Service Schedule

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	Start Of Trading	Opening Auction Call	Continuous Trading	Post Close
EDM	07:00 - 08:15	08:15 - 08:30	08:30 - 17:30	17:30 - 18:30
FXM	07:00 - 09:00		09:00 - 17:00	17:00 - 18:30
EDM Trade Reporting		08:00 – 2	18:30	
FXM Trade Reporting		08:00 – 2	18:30	
EDM Deal Mgmt	08:00 - 18:30			
FXM Deal Mgmt	08:00 - 18:30			
RTC EOD	From 18:30 onwards			
RTC CM Balancing 1	18:50			
RTC CM Balancing 2	19:20			
Post EOD	22:00			
EDM & FXM Derivatives	20:30 (see detailed specs for all SLAs per record type)			
NLMD records				
Client CSV and Trader ID	22:30			
files	22.30			

Go live Reminders

• Contacts

- In preparation for go live your JSE buddy will be in contact with you to confirm the following contact details:
 - 1. Daily Production Operational Contacts
 - 2. ITaC Project Contact (RO, PO, PM)
 - 3. Senior Escalation Contact
- Monitor go live communication status via this link:
 - <u>https://www.jse.co.za/services/technologies/market-communications</u>
- All documentation is available on the ITaC webpage:
 - <u>https://www.jse.co.za/services/itac#OtherDocumentation</u>
 - Data verification signoff sheet
 - Instrument Mapping Spreadsheets
 - Derivatives instrument closing price file (as at COB Fri, 5 April 2019)



Date	Session Topics for Discussion
3 April 2019	Final Go Live Briefing



Questions?

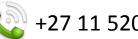
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Please refer all queries to the JSE Client Service Centre (CSC)



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