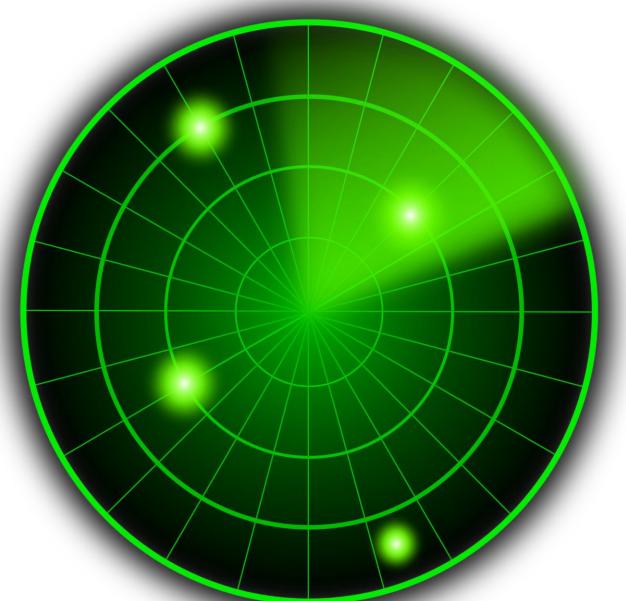
ITaC Clearing Member Workshop

19 July 2017



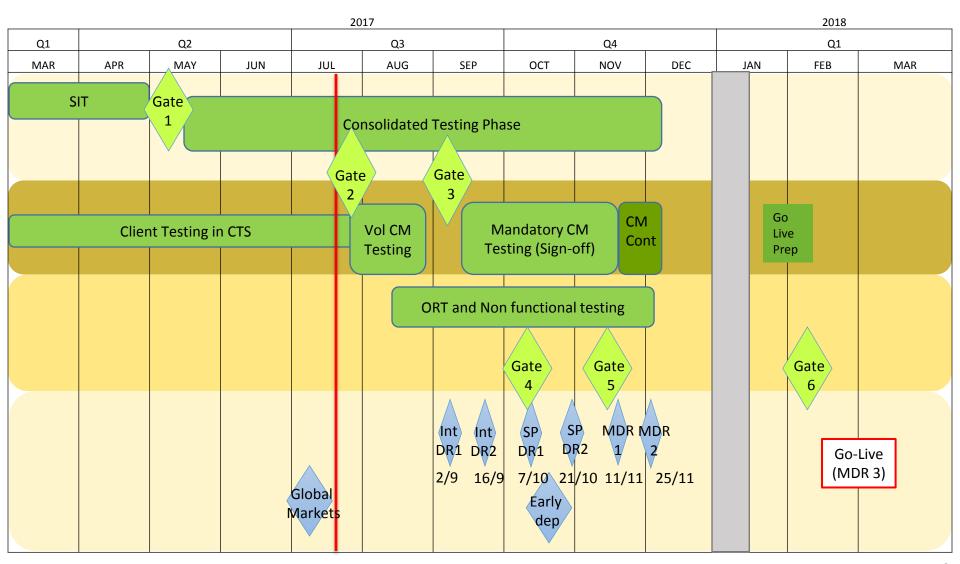
JSE



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Timeline - High Level View





Programme Status update



Status

- Project is on track against all critical path milestones
- JSE's internal testing (Consolidated testing) is on track
- Voluntary Clearing Member testing (VCMT) will commence on Monday, 31
 July 2017
- Client readiness is being tracked including Clearing software provider readiness (and when ready, Clearing Members) are encouraged to join VCMT as early in the process as possible
- FX Collateral based on feedback and consultation with market participants, a decision has been made to de-scope this from Project 1 b/c
- Official conformance status list is available on ITaC webpage

Programme Status update (cont.)



<u>Issues / Risks / Concerns for Programme</u>

- DIS delayed go-live (September/October 2017)
 - Testing of the auto-commit process with CSDPs will be impacted
 - Collateral management testing in VCMT/MCMT will go ahead with Clearing Members as planned
- Bond ETP go-live which may also be Q1 2018
- Ensuring market readiness for upcoming Clearing Member testing

Programme Status update (cont.)



Upcoming key milestones (until end of August 2017)

- Readiness tasks leading up to VCMT by 28 July 2017
- One-on-ones with Clearing Members planned 24- 27 July
- VCMT to commence 31 July 2017
- Commence Data Take-on for MCMT on 25 August



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Overview of VCMT and MCMT



VCMT

- Despite the delays in software delivery, VCMT is still scheduled to kick off on Monday, 31 July 2017
- JSE will continue with its planned VCMT activities, as a test of its ability to successfully disseminate external messages as per the test plan
- Software providers (and when ready, Clearing Members) are still encouraged to join VCMT as early in the process as possible
- Environment used for VCMT will expose a large amount of reference data (member codes and instruments) as taken on from the current production system

Overview of VCMT and MCMT (cont.)



VCMT

- Reminder: prerequisites for involvement in VCMT are successful conclusion of your JSA and completion of the technical enablement process
- Once a signed JSA has been submitted, CMs are required to complete the Enablement Request form (which is available on the JSE's ITaC webpage) and submit their enablement request (this for contains IP address, COMP-Ids, Trader Groups etc.) to CustomerSupport@jse.co.za
- Please be reminded that there is a 7 day SLA for the enablements to be completed – as of the date on which the initial request was logged
- Clearing Members and software providers are asked to please bear these timelines in mind as part of their test execution planning

Test Execution Process

Testing Progress Tracking



All defects will be logged with the CSC Department – either via email or telephone

VCMT

- Daily progress tracking mails:
 - All CMs will be required to send the JSE a daily summary of progress achieved
 - JSE will conduct daily one-on-one calls with participants to assess the outcomes of the daily testing/ assist in query resolution
- Weekly progress meetings:
 - A weekly group conference call will be done at the end of each testing week with all market participants to provide a progress update
 - The update will include a log of any issues / defects reported

MCMT

- Daily progress tracking calls:
 - All CMs will be required to populate a test reporting template and submit to the JSE
 - JSE will conduct daily one-on-one calls with participants to assess the outcomes of the daily testing/ assist in query resolution
- Weekly progress meetings:
 - Daily reports will be consolidated to create a weekly summary
 - A weekly group conference call will be done at the end of each testing week with all market participants to provide a progress update
 - The update will include a log of any issues / defects reported

JSE / CM Engagement During Test Execution

Primary Contacts



Clearing Members

VS.

JSE

- Explanation of the key Clearing Member testing resources:
 - The role of the Clearing Member test manager is be the single point of interaction with the JSE
 - Responsible for test progress tracking
 - The JSE will distribute a progress tracking template
 - Logging of defects
 - Issue escalation

- Explanation of the key JSE testing resources:
 - The JSE's Clearing Testing
 Coordinator will be the primary touch point between the JSE and CMs
 - The coordinator will be responsible for daily progress monitoring and resolution of non-technical queries (not defects)
 - The coordinator will also be responsible for the dissemination of weekly progress summary reports

Overview of VCMT and MCMT (cont.)



MCMT

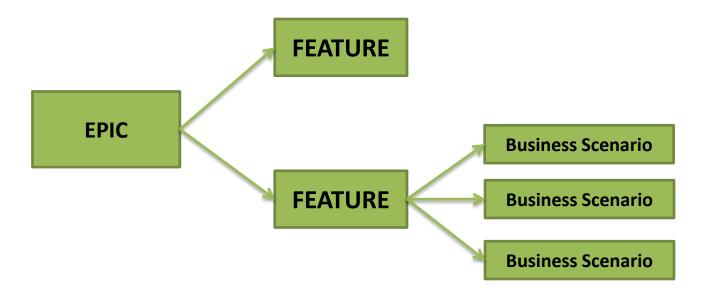
- As previously communicated, MCMT is scheduled for kick off on the 11th of September
- The MCMT Test Approach document will be distributed to Clearing Members, providing an overview of the high-level MCMT test scope, the process for MCMT test execution and the engagement model that will be used during this test phase
 - As part of the testing schedule, it is required that all Clearing Members initiate MCMT testing on the same date i.e. 11 September 2017
- MCMT Test scenarios will be distributed by the first week of August and examples will be presented at a high level in the next section of the presentation
 - Clearing Members are encouraged to review the scenarios in detail and request additional scenarios if required



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MCMT Business Scenarios





MCMT Business Scenarios



EPIC

 An epic indicates the function being tested at its highest level e.g. Deal Management, Collateral Management and Corporate Actions

FEATURE

 All features are linked to an epic, where multiple features fulfill one epic E.g. Deal Management as a Epic has multiple features such as an Accumulation, Allocation, Tripartite Allocation

BUSINESS SCENARIO

- Business scenarios are linked to Features
- A business scenario describes in detail what is being tested

Examples of MCMT Business Scenarios



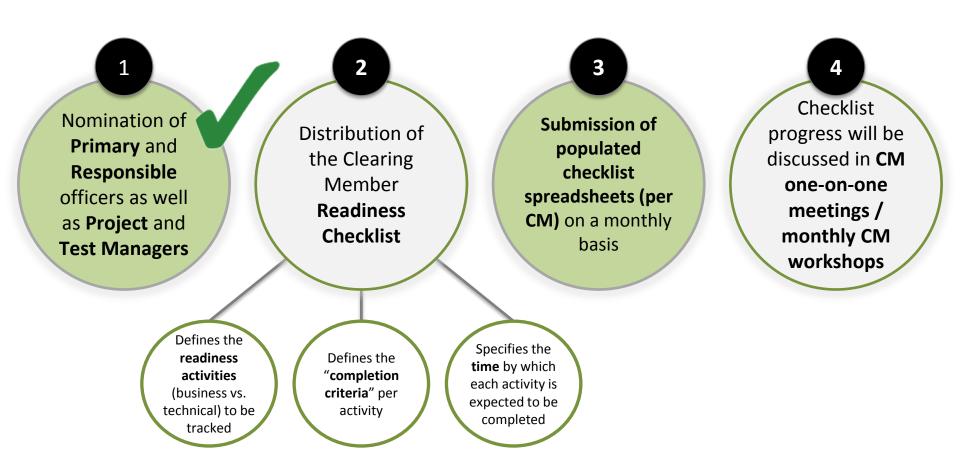
Epic	Feature	Business Scenario
Deal Management	Accumulate trades with subsequent assign	Accumulate and then Assign buy-side, allowed account types: From House main to Branch main:
Position Management	Close Out Anyday expiry on RTC	Close out on EDM with Settlement Type = Cash for Anyday Expiry
Collateral Management	Add Cash Account	Receive request to add ZAR cash account reference data for a Non-resident Client.
Settlement	CM Dalancing	CM Balancing 1
Management	CM Balancing	CM Balancing 2



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Market Readiness – Overview





Market Readiness Checklist Technical vs. Business Activities



Technical Activities	Business Activities
 Relevant technical enablement agreements Connectivity and Bandwidth Requirements Internal Systems Development and Testing Functional Testing 	 Software provider selection and contracting Client Education & Awareness Business Process Changes Review of the JSE Clearing Rules and Directive changes
 Mandatory Clearing Member Testing (MCMT) Mandatory Market Facing Dress Rehearsals Deployment Plan 	Directive changes
 Clearing Member Business Continuity Procedures (BCP) Final Cut-over weekend 	

Monthly Reporting Process



Week 1

- JSE will distribute a checklist to each Clearing Member firm
- The first set of checklists will be distributed at the end of this week

Week 2

- Clearing Members will need to provide their completed monthly checklist to the JSE at the end of the 2nd week of each month
- The Responsible Officer is responsible for providing this feedback

Week 3

- The JSE will consolidate the feedback received in the previous week
- Monthly Clearing Member workshops will be scheduled in the 3rd week of each month where a consolidated view of Clearing Member progress will be provided.



- One-on-one sessions will be scheduled with each Clearing Member in the 4th week of each month where a detailed discussion on the firm's checklist will take place
- At the very least, the Responsible Officer would be required to attend this meeting



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The following key processes are applicable to managing collateral:

- End-of-day: pledging of securities and ZAR cash collateral against initial margin
- Intra-day rebalancing:
 - Withdrawal of pledged securities (call for more cash)
 - Release of cash where additional securities have been pledged
 - Revaluing of pledged securities resulting in top-ups/releases
- Securities for securities substitutions: Throughout the day
- Corporate actions: processing of corporate action events against pledged securities
- Default management: Selling off or transferring of securities and FX collateral in the event of a default

To be covered in future sessions

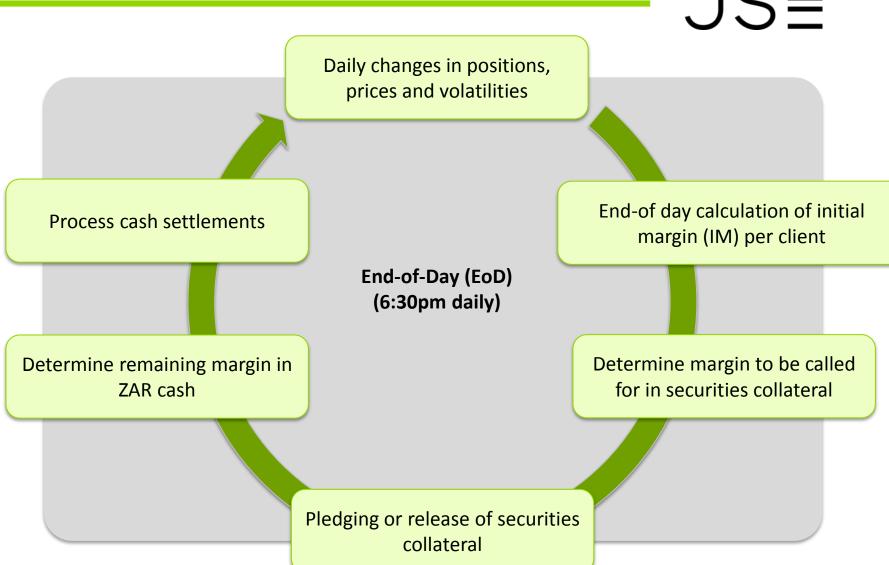
NB. The processing steps and timings that follow exclude FX collateral



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End-of-Day (EoD) – Process overview

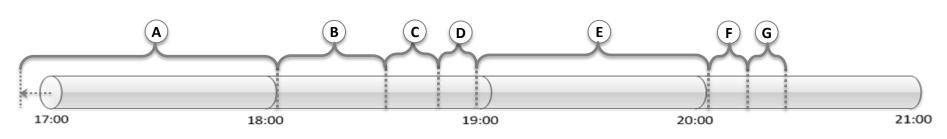


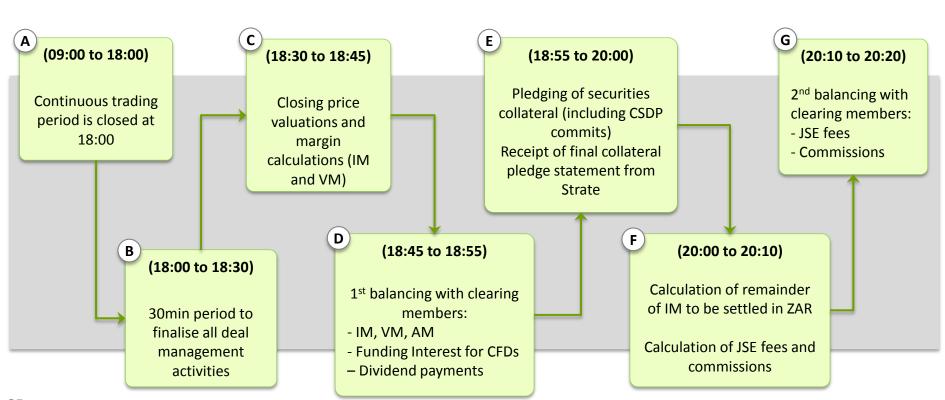


End-of-Day (EoD) – <u>Indicative</u> processing times

NB. The following timelines are indicative and will be firmed up in consultation with market participants

JS≣





End-of-Day (EoD) – Key considerations



- Clearing members to balance with the JSE within the defined balancing time periods
- CSDPs must commit to all securities being pledged to the JSE
 - If CSDP commits are not received within the pledge period, clients' securities will not be pledged to the JSE and IM will need to be covered in ZAR
 - The securities will then only be pledged during the start of the following business day (subject to CSDP commit) with cash being released during the intra-day rebalancing process
- In order to pledge securities to the JSE, clients must have their eligible securities transferred into their Strate SDA account before the start of the end-of-day process
- Only security collateral top-ups, new pledges and releases of pledges due to decreased exposures will be facilitated during the end-of-day process
 - Security withdrawals will be facilitated during the intraday collateral rebalancing process

End-of-Day (EoD) — Key considerations (cont.)



- Delays or issues experienced during the EoD process may result in processing times being pushed out or a rerun being required. Some of the potential delays or issues could be:
 - Incorrect closing prices
 - Clearing members not balancing on margin or other cash amounts
 - Potential system issues at JSE, Strate, CSDPs or Clearing members
- The JSE will ensure that appropriate operational risk mitigations are put in place to minimise delays or reruns during EoD processing
- JSE will continue to work with relevant stakeholders to optimise and reduce the overall EoD process time

Intra-day rebalancing – Process overview



Change in collateral prices from previous end of business day

Collateral movement requests from clients

Release securities once cash payment to JSE Clear confirmed

Calculate and process cash settlements

Clearing Members approve/reject withdrawal requests based on client's availability of cash

Intra-day collateral rebalancing process (11am daily)

Revalue pledged collateral

Collateral revaluing outcomes:

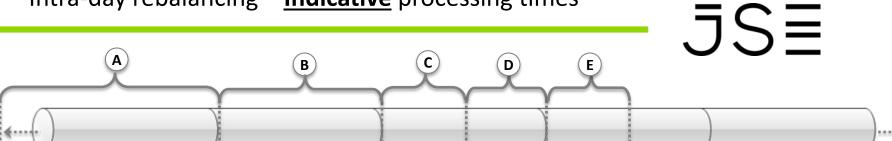
- Top-up: Pledge additional eligible securities if available (cash shortfall if not)
- Reduction: release some of the pledged securities

Process security withdrawals and additional pledges, and determine cash to be called or paid back

Intra-day rebalancing – <u>Indicative</u> processing times

NB. The following timelines are indicative and will be firmed up in consultation market participants

14:00



(09:00 to 11:00)

10:00

Clients may add more eligible securities for pledging and/or request to withdraw pledged securities via Strate or instruction to CSDP

(11:00 to 12:00)

12:00

Latest collateral prices sent to Strate and collateral batch run kicked-off.

Collateral processing includes:

11:00

B

- Revaluing of pledged collateral:
 - Valued higher release of securities or cash
 - Valued lower securities top-up (cash call if no additional securities available)
- Processing of substitution requests:
 - Security for cash (withdrawals)
 - Cash for securities

(12:00 to 12:30)

13:00

Clearing Members approve/reject security withdrawal requests (per client) based on cash availability (13:00 to 13:30)

15:00

Receive settlement confirmations and send and process securities release confirmation at Strate

(12:30 to 13:00)

Generate and process net cash settlement instructions (SWIFT) with settlement banks

Note: Securities for securities substitutions are processed throughout the day

Intra-day rebalancing – Key considerations



- Clients may perform <u>security</u> for <u>security</u> substitutions continuously throughout the business day
- All <u>cash for security</u> substitution (i.e. security withdrawal) requests received after 11am will only be processed during the intra-day rebalancing process the following business day
- Any additional securities that are made available for pledging (i.e. <u>securities for cash</u> substitution) throughout the day will be pledged to the JSE if within the maximum securities collateral allowance limit
 - The cash release as a result of the additional pledged securities will only be done during the intra-day rebalancing process or at EoD – clients may be over collateralised for a few hours in this case

Intra-day rebalancing – Key considerations (cont.)



- In order to fully service all client collateral substitutions and top-ups/releases due to revaluation of collateral:
 - Clearing members must be able to timeously approve all client cash calls if not approved/rejected in time, security withdrawal requests will be failed by the JSE
 - CSDPs will need to perform commits continuously or periodically by certain cutoff times during the day; auto-commit capability required
- All intra-day cash settlement instructions must be processed and confirmed before SAMOS cut-off



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Corporate actions – Process overview



- Step A: Daily update of corporate action schedule
- **Step B:** JSE assess and identifies all corporate action events that may have an impact on any of the JSE eligible securities collateral. Two possible assessment outcomes:
 - Securities become ineligible e.g. de-listing, name change
 - Security remain eligible e.g. cash dividend
- **Step C:** JSE to send out a corporate action market notice to all clients who have pledged securities that are impacted
- **Step D:** Upon (LDT-5), JSE may start to gradually reduce the maximum value that can be pledged for securities that will become ineligible
 - This is done to minimise large potential cash calls at EoD on Record Date (LDT+3)

Corporate actions – Process overview (cont.)



- Step E: Upon (LDT):
 - Strate will automatically start triggering substitution requests (cash replacing securities or securities for securities) for all securities that will become ineligible
 - For pledged securities that will remain eligible, Strate will automatically lock all pledges until Record Date (RD)
- **Step F:** Upon (LDT+3) i.e. Record Date:
 - pledged securities that remain eligible will be unlocked
 - remaining pledged securities that are ineligible will be automatically unpledged, resulting in a mandatory cash call at EoD



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Client enablement process



Steps to be followed by clients to be enabled for securities collateral service:

Step 1	Contact trading member or clearing member to initiate enablement process
Step 2	Contact existing/new CSDP to create a new Segregated Depository Account (SDA) at the CSD (Strate)
Step 3	Complete necessary securities collateral enablement forms (* see list below) and submit to Strate
Step 4	Receive confirmation from Strate once client accounts are loaded into their collateral management system and linked to the JSE
Step 5	Transfer eligible securities into newly created SDA at Strate

- * List of forms to be completed by all new clients at Strate:
- Collateral Management Service Agreement (CMSA) for Collateral Givers
- Customer and Segregated Depository Application Form
- Strate Collateral Management Eligibility Giver Forms

Client enablement process – Key considerations



- The current securities collateral solution is only available to:
 - Derivative trading members/brokers (in their proprietary capacity), and
 - non-controlled equity clients that trade in JSE derivative markets

(NB. Investigations currently underway to enable this service for controlled equity clients that trade in the JSE derivative markets)

- Loading of new client accounts at Strate limited to 3 to 5 clients per business day
 - Clients wishing to make use of this service are advised to sign-up as soon as possible

Client enablement process – Key considerations (cont.)



- JSE is currently in the process of sending out a securities and FX collateral survey to all derivative trading members and their clients
 - Primary purposes of the survey to gain a better understanding of:
 - the number of clients that will be utilising this service
 - the types of securities and FX collateral that they are most likely to post
- The outcomes of the survey will be used to plan the client enablement process more effectively as well as finalising the list of eligible securities
- One-on-one meetings with trading members are being arranged to discuss any open questions or concerns with regards to the new securities collateral service



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