

JSE T+3

Project Overview and Frequently Asked Questions

August 2015

Introduction:

This document has been created to provide an overview of the T+3 project: explaining what a settlement cycle is, why South Africa has chosen to move from its current 6 day (T+5) schedule to a new 4 day (T+3) cycle, and how the shortening of the settlement cycle is expected to impact the local equities market. Additionally the document will give details of the manner in which the JSE intends implementing the final phase of the T+3 project, detailing the project structure and scope.

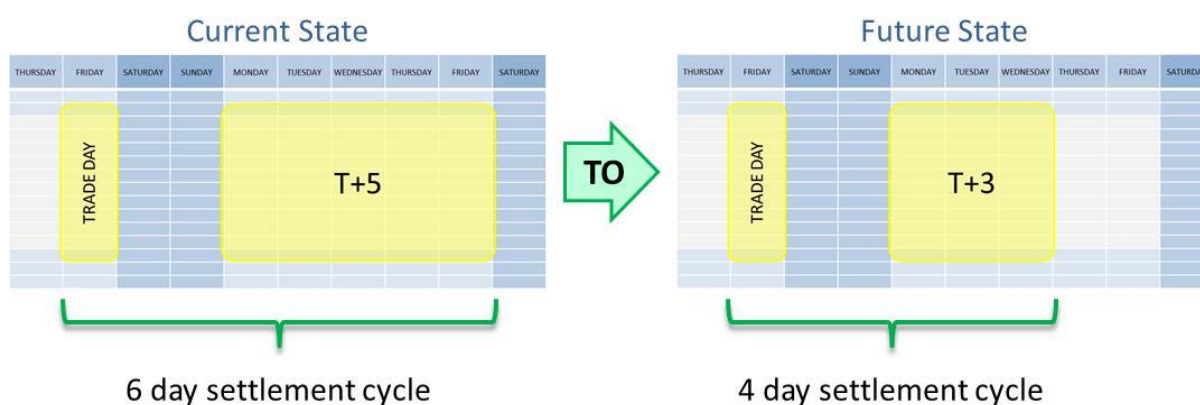
Further to this, the document also provides responses to a number of commonly asked questions relating to the T+3 initiative (see Appendix 1).

T+3 Overview:

What is T+3?

“T+3” (or “T3”) is the abbreviation used to describe the JSE-driven market initiative to shorten the settlement cycle in the cash equity market from its current 6 day (or T+5) schedule to a new 4 day schedule. The T+3 project is a multi-year programme of work, and was kicked off in 2013.

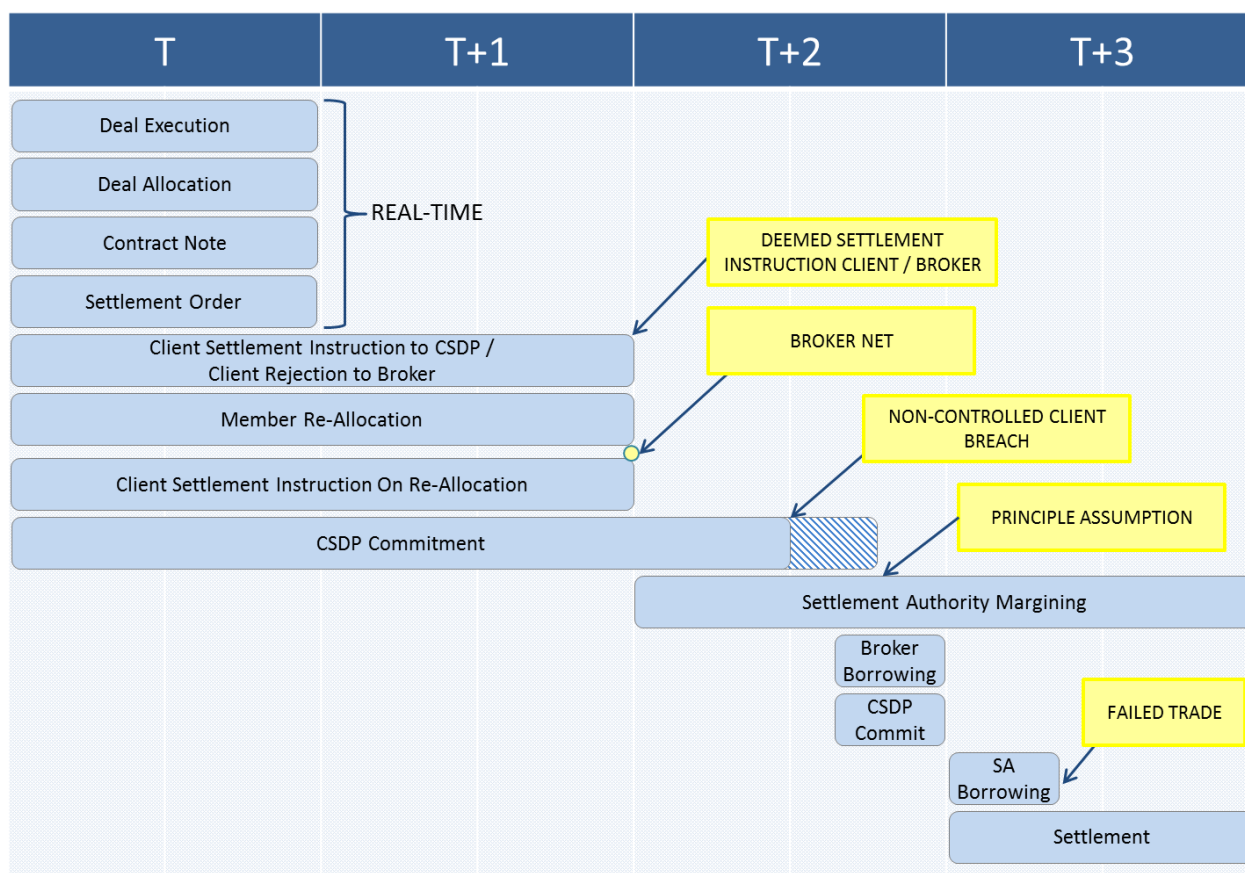
On the JSE’s Equity Market, settlement is the process whereby equities are delivered in exchange for payment. “T+3” refers to the number of days – counting from the day on which a trade takes place – within which a trade must be settled. To settle a securities transaction the seller of the share must receive payment and the buyer must take ownership of the share.



What does the T+3 project aim to achieve?

The objective of the project is to shorten the cash equity settlement cycle to T+3, thereby aligning the South African market more closely with international benchmarks and standards (such as the IOSCO principles for Financial Market Infrastructures). The project has thus far seen the launch of the JSE’s new state of the art Equities Clearing System (ECS), which is a prerequisite for the JSE to move to T+3, and the introduction of a number of enhancements to the JSE’s other legacy systems.

The move to T+3 will see a change in the schedule of events that form part of the settlement cycle. The following diagram provides a graphical view of the manner in which the settlement activities will be reorganized:



Why is the JSE undertaking this project?

The idea of a shortened settlement cycle has been contemplated within the local market for many years, and in 2012 the move to T+3 was formally mandated by South Africa's Financial Services Board (FSB), the JSE's regulator.

In addition to being a regulatory imperative, the move will also bring the South African equities market closer to international settlement cycle benchmarks

Although many countries have moved or are in the process of moving to a T+2 settlement cycle the South African market will move to a T+3 settlement cycle and will further review moving to a T+2 settlement cycle after T+3 has been implemented.

What are the intended benefits of the move to a T+3 settlement cycle?

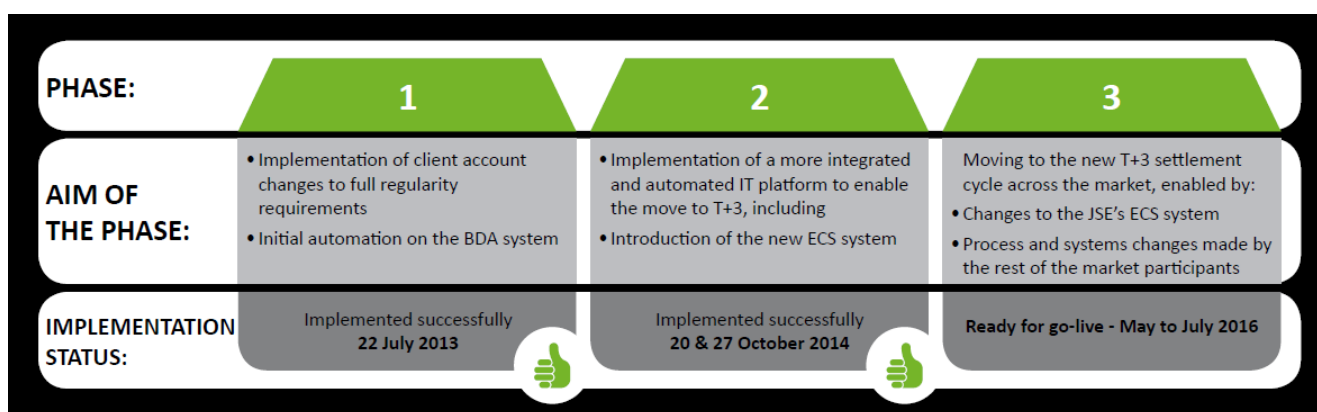
In addition to improving the credibility of our local equities market (via alignment with global best practice), the shortened settlement cycle will also unlock a number of operational benefits:

- Harmonisation across international markets – reducing complexities resulting from timing differences between jurisdictions with different settlement cycles

- Increased liquidity – enabling faster reinvestment of assets that are released from the settlement process quicker
- More prudent risk management
- A reduction in the number of outstanding unsettled trades, which in turn will:
 - reduce settlement exposure / credit risk
 - reduce systemic risk
 - improve operational efficiencies (by causing participants to adapt and modify behaviours)

How is the project structured?

The T+3 project will be implemented in 3 phases, 2 of which have already been successfully taken live. The following diagram provides an overview of the contents and timing of the 3 phases:



The following tables give a detailed overview of the changes implemented per phase, and the manner in which these changes are expected to impact participants in the equities market:

T+3 PHASE 1 – Constituents and Impacts - IMPLEMENTED		
What did we achieve	Changes introduced	Market participants impacted
Phase 1 of the project was primarily internally focused, and resulted in the implementation of initial automation within the BDA system and other system changes to fulfill regulatory requirements.	<ul style="list-style-type: none"> • <u>BDA:</u> <ul style="list-style-type: none"> ○ Separation of Proprietary and Controlled client custody accounts and the processing thereof (linked to the changes specified by the Financial Markets Act) ○ Further automation of Corporate Actions (between the Brokers and their respective CSDPs), which laid the foundation for further changes implemented with Phase 2 of the project 	<ul style="list-style-type: none"> • <u>Brokers:</u> <ul style="list-style-type: none"> ○ BDA: The implementation of custody account changes (the separation of Proprietary and Controlled client custody accounts) and the processing thereof ○ Previously manual back-office processes relating to Corporate Actions were automated between the Brokers and their respective CSDPs

T+3 PHASE 2 – Constituents and Impacts – IMPLEMENTED		
What we will achieve	Changes introduced	Market participants impacted
<p>Phase 2 was again primarily internally focused, and saw the implementation of a more integrated and automated IT platform to enable the move to T+3.</p> <p>This was done primarily through enhancements to the BDA system (allowing for real-time deal management and further automation for brokers) and the introduction of the new Equities Clearing System (ECS) system which replaced the existing Trade Monitoring System.</p>	<ul style="list-style-type: none"> • <u>Equities Clearing System - ECS (First Phase):</u> <ul style="list-style-type: none"> ○ Implemented a new JSE clearing system to replace the existing Trade Monitoring System. This new system caters for all functionality offered by the outgoing system as well as a host of new enhancements. It also caters for the following clearing and settlement functionality – previously facilitated by the BDA system: <ul style="list-style-type: none"> – Creation of settlement instructions to the CSD – Netting of prop and controlled clients (netting of settlements at EOD T+2) – Risk Management (coverage of Proprietary and Controlled client deals, commits by CSDP and margining at EOD T+3) • <u>BDA Enhancements:</u> <ul style="list-style-type: none"> ○ Real-time deal management (allowing for real-time allocations, trade confirmation, settlement instructions (via ECS) and commits by the CSDPs) ○ Automation for Brokers (i.e. Prime Broking, further Corporate Actions enhancements and back-office operations) 	<p>The Phase 2 market impact was relatively low, with the main focus being on internal JSE systems.</p> <ul style="list-style-type: none"> • <u>Brokers:</u> <ul style="list-style-type: none"> ○ ECS: Brokers were given view-only access to the new system – to enable the monitoring of settlement ○ BDA: shortening of trade execution timelines via real-time processes ○ Some previously manual back-office processes are now automated • <u>Buy-Side Clients:</u> <ul style="list-style-type: none"> ○ They are now encouraged to generate allocations as soon as possible after trade (for submission to BDA) and send settlement instructions to their CSDPs to commit to the transactions

T+3 PHASE 3 – Constituents and Impacts – CURRENTLY IN PROGRESS

<i>What we will achieve</i>	<i>Changes being introduced</i>	<i>Market participants impacted</i>
<p>Phase 3 is currently underway and has a significant impact on all Equity Market participants. Phase 3 focuses on moving the market to the new T+3 settlement cycle. This will be enabled by changes to the JSE's ECS system, along with a series of process and systems changes which are to be made by the rest of the market participants (covering post-trade and post settlement).</p> <p>The shortening of the settlement cycle increases the likelihood of more failed trades - which is the key focus of Phase 3 in terms of providing functionality to manage this on a daily basis.</p>	<ul style="list-style-type: none"> • <u>Equities Clearing System – ECS (Second Phase):</u> <ul style="list-style-type: none"> ○ Adoption of new processing timelines to align to the agreed T+3 settlement cycle (i.e. netting and margining will occur at EOD T+1) ○ Introduction of Fails Management automation (to accommodate the projected volumes of failed trades that are expected by the move to T+3 - with integration across the market (Brokers, Strate, CSDPs and clients)) • <u>BDA:</u> <ul style="list-style-type: none"> ○ Further automation for Brokers (i.e. portfolio moves, account transfers, SLBs and Collateral) and upload files ○ Adoption of new processing timelines to align to the agreed T+3 settlement and Corporate Action cycles (and the aforementioned ECS changes) ○ Terminating transactions processing • <u>External:</u> <ul style="list-style-type: none"> ○ Change of in-house systems and processes to align to the agreed T+3 settlement and Corporate Action cycles ○ Processing of Corporate Actions aligning to the new T+3 settlement cycle ○ Terminating transactions processing 	<ul style="list-style-type: none"> • <u>Brokers:</u> <ul style="list-style-type: none"> ○ ECS: Introduction of new functionality and processing timelines ○ BDA: changes to accommodate the T+3 settlement cycle including Corporate Actions ○ Previously manual back-office processes will now be automated ○ Introduction of new and updated processes to accommodate the move to T+3 • <u>Strate:</u> <ul style="list-style-type: none"> ○ Changes to accommodate the T+3 settlement cycle including Corporate Actions ○ Changes to accommodate the new Failed Trade processes ○ Introduction of new and updated processes to accommodate the move to T+3 • <u>CSDPs:</u> <ul style="list-style-type: none"> ○ Changes to accommodate the T+3 settlement cycle including Corporate Actions ○ Changes to accommodate the new Failed Trade processes ○ Introduction of new and updated processes to accommodate the move to T+3 such as terminating transactions ○ Other automation such as off-markets, etc. • <u>Buy-side:</u> <ul style="list-style-type: none"> ○ Changes to accommodate the T+3 settlement cycle including Corporate Actions ○ Changes to accommodate the new Failed Trade processes ○ Introduction of new and updated processes to accommodate the move to T+3 • <u>Overseas counterparties:</u> <ul style="list-style-type: none"> ○ Changes to accommodate the T+3 settlement cycle including Corporate Actions ○ Changes to accommodate the new Failed Trade processes ○ Introduction of new and updated processes to accommodate the move to T+3 ○ Changes relating to removals between registers

In addition to the system-related changes referenced in the table above, the JSE is also involved in a number of activities which are aimed at facilitating the market's smooth transition to the shorter settlement cycle:

Enabling activities	Activity detail
<i>JSE Rules and Directives</i>	<ul style="list-style-type: none"> These have to be changed to accommodate the requirements of the shorter settlement cycle. This impacts members, clients and their agents (CSDPs) – and covers trading, clearing and settlement and corporate actions (for Controlled clients) processing. These need to be completed 6 months before go-live.
<i>JSE Listing Requirements</i>	<ul style="list-style-type: none"> These have to be changed to accommodate the requirements of the shorter corporate actions cycle. This impacts issuers and indirectly members, clients and their agents. These need to be completed 6 months before go-live.
<i>Strate Rule and Directives</i>	<ul style="list-style-type: none"> These have to be changed to accommodate the requirements of the shorter settlement cycle. This impacts CSDPs and their clients – and covers settlement and corporate actions processing. These need to be completed 6 months before go-live.
<i>Alignment of off-market transaction processing to the new on-market settlement cycle (along with known dependencies)</i>	<ul style="list-style-type: none"> Off-market transactions are changed to sync up with the new T+3 settlement cycle Automation of off-market transactions between the CSDPs and Strate – <i>this functionality went live in 2015</i>
<i>SLB liquidity</i>	<ul style="list-style-type: none"> The goal is to encourage more lending activity (via market education) Market education regarding the impact of Corporate Action activity on SLB (so lenders do not recall securities where there are complex Corporate Actions) System changes so that lenders can facilitate loans for future entitlements or entitlements on newly listed shares based on Corporate Actions Differentiation of settlement-related and strategic SLB activities (and specifically the role of the JSE Settlement Authority as lender of last resort)
<i>Process for removals and impact on settlement</i>	<ul style="list-style-type: none"> The documentation of all processes for movement of shares for dual listed companies Automation of inefficient processes Market education to drive awareness of the process
<i>Corporate Actions</i>	<ul style="list-style-type: none"> Education of the market to explain what Corporate Actions are, and how they impact activity in the market Automation of Corporate Actions between Brokers, CSDPs and clients using the global standard of ISO15022

Members should note that the new processes and timelines for T+3 will have a direct and fundamental impact on clients' material obligations and the way clients settle - it is therefore imperative that clients ensure they stay abreast of changes. The JSE will be publishing a document detailing these material obligations.

When will project go-live?

The final go-live date for T+3 is in the process of being determined, and its final confirmation will be dependent on the following considerations:

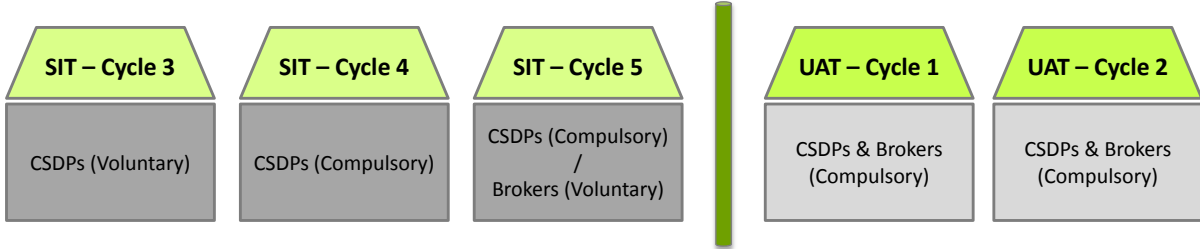
1. *Technical readiness of the JSE and market participants* – The JSE cannot take the move to T+3 live without substantial changes to market participants (Brokers / CSDPs / Strate / Lending Desks / Clients) systems which also includes extensive testing. After consultation with the market participants and getting feedback on milestones such as development and full end-to-end market testing timelines, the JSE has indicated that that T+3 will be taken live between the months of May and July of 2016
2. *Business readiness of the market participants* – The revised schedule of events (that form part of the new T+3 settlement cycle) have a direct impact on all market participants and their clients, as a number of internal process changes will have to be affected to ensure that the market is able to align to the new T+3 timetable. The shortening of the cycle means that various settlement activities have been reshuffled, and the market will have to make sure that it has designed and adopted the necessary process changes to fall in line with the new T+3 timeline.

The JSE has been in discussions with all market participants (locally and abroad), and indications are that **all parties will be ready to take the project live during the period of May to July in 2016**. A more specific date will be determined as the JSE and the market complete full end-to-end market testing and progress through their respective readiness activities.

How does one raise queries related to T+3?

Any queries related to the T+3 project can be submitted to the following email address: T+3@jse.co.za

Appendix 1 - Frequently asked questions:

#	Question	Response
1	What does T+3 stand for?	"T+3" stands for <i>Trade plus 3 days</i> . Every trade will settle 3 business days after trade date.
2	How does the JSE plan to provide regular status updates on the progress of the T+3 implementation?	<p>Progress updates will be delivered in a number of ways:</p> <ul style="list-style-type: none"> • T+3 Mailers (every 6-8 weeks) • T+3 Market Comms sessions (held at the JSE at least quarterly) • Market Notices • T+3 stakeholder meetings: <ul style="list-style-type: none"> ○ Clearing & Settlement Advisory Committee (CSAC) ○ T+3 Market Steering Committee ○ T+3 Marketing and Education Committee ○ T+3 Project Managers Forum ○ T+3 Test Managers Forum
3	When will the market be required to participate in T+3 testing, and is it compulsory?	<p>Market participants will be asked to take part in 2 phases of testing, namely System Integration Testing (SIT – light market involvement) and User Acceptance Testing (UAT – intensive market involvement).</p> <p>The diagram below explains the testing phase involvement per market participant</p> <div>  <p>SIT – Cycle 3 CSDPs (Voluntary)</p> <p>SIT – Cycle 4 CSDPs (Compulsory)</p> <p>SIT – Cycle 5 CSDPs (Compulsory) / Brokers (Voluntary)</p> <p>UAT – Cycle 1 CSDPs & Brokers (Compulsory)</p> <p>UAT – Cycle 2 CSDPs & Brokers (Compulsory)</p> </div>

4	Does the JSE plan to create a standard test pack for testing?	<p>Test scenarios and test packs, which include testing between JSE, Strate, CSDPs and Brokers will be developed by the JSE and distributed to the market for review PRIOR to the start of the various testing phases. Additionally, instructions for reference data set-up will also be shared.</p> <p>Test packs will be revised during the test process (taking into account changes emanating from the bug identification/bug fix process).</p> <p>The entry and exit criteria per testing phase will also be confirmed prior to the start of testing.</p> <p>CSDPs will need to sign-off after each cycle of testing highlighting any potential issues which may impact on the go-live date.</p>
5	Does the JSE plan to provide in-house training to the Brokers and workshops with CSDPs?	<p>The JSE's Phase 3 training plan is currently in development, and the intention is to have all training delivered at the JSE's premises for brokers.</p> <p>The JSE has also offered to do workshops for the CSDPs so that the CSDPs staff can understand the impending changes for T+3.</p> <p>All training materials will be made available via the JSE's website, and the JSE is currently investigating the possibility of some form of remote training.</p>
6	Where and when does the JSE plan to publish T+3 documentation to the market?	<p>All T+3 related documented will be made available on the JSE's website, and can be accessed via the following link:</p> <p>https://www.jse.co.za/services/post-trade-services/t3settlement</p> <p>Documentation is already available on the website.</p> <p>The JSE intends publishing a series of educational reference materials to the market, starting from September 2015. The market will be notified of the publication of these documents via a service hotline, and copies of the docs will be made available on the website (via the link above).</p>
7	When will the updated rules and directives be published to the market?	<p>The market will be consulted with regards to the intended JSE and Strate rules and directives changes in Q4 of 2015. The actual proposed changes will be circulated for public commentary in Q1 of 2016.</p>

8	Does South Africa plan to move to a T+2 settlement cycle?	<p>The decision regarding changes to the settlement cycle is one that will be made in conjunction with the JSE, the market participants and the relevant regulators.</p> <p>It has been agreed that once the move to T+3 has been successfully implemented, investigations will begin as to the viability of a further shortening of the settlement cycle. This may also include a change in settlement methodology</p>
9	What analysis has the market done on the impact of margining for T+3 Phase 3, given the shorter cycle?	Margin calculations move to the EOD T+1. The JSE is currently analyzing data to see the impact to the market – this data will be shared with the applicable JSE members and actions will be discussed.
10	Has there been enough education in the market around securities and funds availability and its impact on trading?	<p>This only affects Controlled Clients (clients that hold their assets with a JSE member) and Proprietary Deals (JSE member own deals).</p> <p>Changes relating to this went live with T+3 Phase 2 and the brokers are aware of the impact. Changes for Phase 3 have also been workshopped with the brokers.</p>
11	What is the expected percentage of trades that will be failed / rolled by the JSE?	There is currently no system that can predict how many failed trades there will be. There are steps being taken to ensure that there is a minimal amount of failed trades in the market, and we have built systems that cater specifically for higher volumes.
12	Has there been enough education on the impact of Failed Trade Procedures and Rolling of Settlement on Corporate Actions?	There has been substantial education across the market with regards to Failed Trade Procedures and the impact on Corporate Actions (where the underlying instrument is involved). However, education for both local and global participants will take place all the way until go-live.
13	Has the idea of mass rolling been questioned and analysed by the market?	This has been discussed in the market for some time now (before discussions on T+3). Due to various systems constraints and linkages with settlement, it is not possible to do a mass rolling. However, other investigations (not linked to T+3) are currently underway which may assist with this.
14	What will the impact be to the market if the JSE / CSDP has a prolonged system outage in a shorter settlement cycle?	Settlement failure is a likely outcome of extended system outages. The JSE has a workstream within the T+3 project which focuses on market participants Business Continuity Procedures and Disaster Recovery plans to decrease the likelihood that systems will be down for extended periods of time.

15	When will the JSE confirm whether BDA will have extended on-line hours, and for how long?	The extension of support timelines has been discussed with the market. Due to the length of the BDA batch, extending on-line hours will have a direct impact on the BDA batch and various SLAs. For the moment, BDA will not be extended past the current time of 19h00.
16	Besides the T+5 to T+3 migration what other functionality is being delivered for Phase 3?	In addition to the T+3 functionality, the JSE also intends delivering a new CAPAD web front-end (replacing the current Capital Adequacy download) as part of the Phase 3 implementation.
17	Will clients' mandates change?	The JSE and Strate, as Financial Market Infrastructures, have come out with the times that affect their participants (Brokers and CSDPs). For the participants to align to the JSEs and Strate's timings, client's settlement schedules will have to change (which in turn will result in changes to their mandates).
18	Will clients (buy-side) be involved with testing?	<p>The JSE (on behalf of the Brokers) will be testing with the buy-side in stances where the fund managers take electronic contract notes (SWIFT MT 515s) from the Brokers.</p> <p>Clients must discuss testing with their respective CSDPs to clarify what testing will be required between the CSDPs and themselves.</p>
19	What are the mechanics around scrip lending for trades where links are broken and there is insufficient time to recall?	The back-to-back links are currently under discussions. These have to be moved to ensure that there is sufficient time for corrective action to be taken in whatever form. However, should corrective action not be taken, the settlement order will go into reverse substitution.
20	Does the market have a roll-back plan for Phase 3 go-live?	The deployment plan will be discussed with the market to confirm the checkpoints throughout deployment and when the final go/no-go decision will be made. The deployment plan will make allowance for roll-back until the final decision has been made.
21	Have plans been put into place to interactively inform the market of go-live progress over the go-live weekend?	<p>Parties, such as Strate, the CSD participants and JSE members, who will be actively involved with the deployment, will be kept up to date with several check points planned throughout the go-live weekend.</p> <p>The market will be notified via a JSE Market Notice of the go/no-go decision, after deployment has been completed / rolled back.</p>
22	Are all market participants going live at the same time?	All market participants will have to make the change for the T+3 settlement cycle on the same weekend.

23	What would it mean if a CSD participant is unable to move to a T+3 settlement cycle with the rest of the CSD participants?	<p>The JSE has planned to start testing with Strate and the participants as early as possible - with System Integration Testing (SIT) starting in Q3 2015 and User Acceptance Testing (UAT) ending in Q2 2016.</p> <p>The JSE will be monitoring the CSD participants readiness throughout System Integration Testing (SIT) and User Acceptance Testing (UAT) with sign-off expected after each cycle.</p> <p>The JSE will be able to pick up issues throughout the testing process and address these with the affected CSD participants.</p>
24	Are there any market interdependent projects going live prior or with T+3 Phase 3 go-live?	<p>No interdependent projects have been identified per say: as mentioned already, the T+3 project was broken into 3 phases, in an effort to reduce the implementation complexity per phase. The market has also identified current inefficiencies in the settlement cycle (such as certain corporate action processing activities), and has changed the processing and automation around these in preparation for the final go-live of T+3.</p> <p>The JSE and the market have made the T+3 project the number one priority project which takes precedent over all other initiatives.</p>
25	Moving to T+3, will any of the changed processes have a financial impact on the Broker/CSDP/Client such as penalties and fees from a JSE?	Penalties and fees are considered as punitive and are used to encourage certain behaviours within the settlement cycle. It is not envisaged that there will be any changes to the current penalties and fees.
26	Elaborate on the general market sentiment in moving from T+5 to T+3 settlement cycle?	<p>The market is generally excited about moving to T+3. This is driven by several factors, the most important of which are:</p> <ul style="list-style-type: none"> • Reduction of credit and market risk with the shortening of the settlement cycle • Efficiencies being brought about by the automation that is being introduced. <p>Having said this, there is concern and uncertainty relating to the potential for daily failed trades – a phenomenon that is uncommon in the local market, and which few participants have any firsthand experience with.</p>

27	Regarding 'The barriers to moving to a T+3 settlement cycle' document circulated to the market participants a few years ago., will the market have addressed all these barriers when T+3 Phase 3 goes live?	All of the barriers that were detailed will have been addressed in some form by the go-live of T+3 Phase 3.
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