

BLUEPRINT FOR THE MOVE TO T+3

June 2014

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| Document | Author | Version | Issue Date |
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| 20070612-Setting course for T+3 (PowerPoint presentation) | Brett Kotze | 0.1 | 12/06/2007 |
| 20070620-Project management approach to moving to T+3 | Brett Kotze | 0.1 | 20/06/2007 |
| 20070629-Overcoming barriers for moving to T+3 | Brett Kotze | 0.1 | 29/06/2007 |
| 20070717-B&A_Demetarialisation_&_SLB | Brett Kotze | 0.1 | 17/07/2007 |
| 20070724-B&A_STP_&_Systems_availability | Brett Kotze | 0.1 | 24/07/2007 |
| 20070807-B&A_Corporate_Actions | Brett Kotze | 0.1 | 07/08/2007 |
| 20070821-B&A_Moving_Shares_&_Off_Markets | Brett Kotze | 0.1 | 21/08/2007 |
| 20070821-Process_flow_movement_of_shares | Brett Kotze | 0.1 | 21/08/2007 |
| 20070904- B&A_Providing_Settlement_Assurance | Brett Kotze | 0.1 | 04/09/2007 |
| 20070911-B&A_CSR_&_Real- time_trade_processing | Brett Kotze | 0.1 | 11/09/2007 |
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| 20071106-High_Level_Action_Plan | Meera Sunker | 2.0 | 06/11/2007 |
| PMO_T+3_Schedule_20080904 | Strate | | 04/09/2008 |
| PMO_T+3_Blueprint_1.1 | Strate | 1.1 | 30/09/2008 |
| T+3 Project-status Report Q3 2008 | Brett Kotze | | 21/08/2008 |
| T+3 Project-status Report Q4 2009 | Brett Kotze | | 06/04/2009 |

Please note that documents could have taken the form of discussions, interviews, presentations, workshops, white papers etc.

2. Version Control

| Version | Author | Date | Reason for Changes |
|-------------|-------------------|-----------------|--------------------------------------|
| 0.01 Draft | Chris Parrish | 14 October 2008 | Document creation |
| 0.02 Draft | Chris Parrish | 15 October 2008 | Update with comments |
| 0.03 Draft | Brett Kotze | 06 April 2009 | Update the document |
| 0.04 Draft | Debby Harrison | 07 April 2009 | Update the document and transfer to |
| | | | new template |
| 0.05 Draft | Brett Kotze | 09 April 2009 | Edit the document |
| 0.06 Draft | Brett Kotze | 15 April 2009 | Edit the document |
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| | | | comments |
| 0.08 Draft | Brett Kotze | 30 April 2009 | Update with comments received from |
| | | | stakeholders |
| 1.00 Final | Brett Kotze | 18 May 2009 | Approved by JSE Exco. Moved to final |
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| | | | workshops held with Strate and the |
| | | | CSDP's. |
| 2.00 Final | Anina De Villiers | 30 June 2014 | Moved to final |

3. Introduction

3.1 Purpose

This document aims to present the blueprint for the T+3 Project, and has been created by collating and presenting all identified and proposed T+3 requirements / changes as a blueprint for the South African equities market in order to facilitate the move to T+3 rolling contractual settlement.

3.2 Stakeholders

The following Stakeholders have been identified as integral to the success of the project and the overcoming of all the Barriers to T+3:

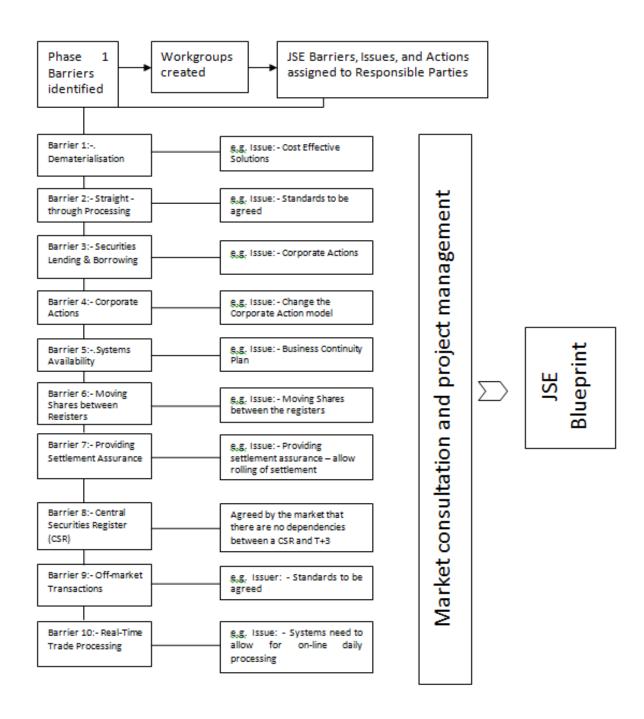
- Various Divisions of the JSE;
- JSE equity members;
- Strate;
- National Markets Practice Group (NMPG);
- South African Securities Lending Association (SASLA);
- South African FIX Committee;
- CSDPs;
- Foreign Banks;
- Foreign Brokers;
- ASISA;
- Lending Desks;
- CSIG;
- Issuers, their sponsor and their agents; and
- Transfer Secretaries.

3.3 Scope

The high-level "Action Plan – Move to T+3" document, produced as a final deliverable of phase 1 of the project, mandated certain responsible parties (made up of various stakeholders and market participants), to further investigate and provide resolutions and recommendations to all barriers, issues and actions identified – in essence, the creation of a hybrid of a Business Requirement Specification / Functional Specification.

The documents detailing resolutions on barriers (and sub-barriers thereof), assigned to the JSE and to other parties such as Strate, SASLA, NMPG and South Africa FIX committee, are not included in this document and will be made available separately on the JSE's website.

Certain assumptions have been made during this particular phase of the project, and have been specified in the documented findings and recommendations (included in the body of this blueprint or as appendices).



3.4 Overview

The process for defining how the market will move to T+3 is broken into 3 distinct stages:

Stage 1



• The creation of a document detailing the barriers to the move to T+3, and the high-level activities to overcome such barriers with agreed nominated parties. This document is to be used to drive investigations and timeline estimates for overall project completion;

Stage 2

• The creation of Workgroups (by the responsible parties) to further the investigations - the combined outputs of this process being the creation of a "Blueprint for Moving to T+3" document and the definition of delivery dates of identified outputs; and

Stage 3

• Based on the investigations and BRS/FRS created, the creation of an Impact Analysis and Implementation Plan for T+3.

Current Status:

Stage 1 has been completed and a document entitled "Action Plan – Move to T+3" detailing the barriers, issues and the high-level activities to overcome such barriers with agreed nominated parties has been produced and was approved by the JSE's Executive Committee on 15 October 2007.

Stage 2 has been completed with the creation of this document and the various artefacts detailing the requirements for enabling the move to T+3.

Stage 3 is in progress.

The JSE has broken the implementation of the move to a T+3 settlement cycle into 3 specific go-live phases as follows

Overview of the project phases and impacts:

| T+3 PHASE 1 – Constituents and Impacts - IMPLEMENTED | | | | |
|--|--|---|--|--|
| What did we achieve | Changes being introduced | Market participants impacted | | |
| The aim of this phase | • <u>BDA:</u> | Brokers: | | |
| was the | Separation of Prop and Controlled | BDA: process in respect of prop | | |
| implementation of | client accounts (linked to the changes | and controlled client transactions | | |
| changes to fulfill | in the FMA) | (movement of securities based on | | |
| regulatory | Automation of Corporate Actions | settlement) | | |
| requirements and | (between the Brokers and their | Previously manual back-office | | |
| initial automation on | respective CSDPs), which laid the | processes relating to Corporate | | |
| the BDA system. | foundation for Phase 2 | Actions were automated | | |
| | | | | |
| T+3 PHASE 2 – Constituents and Impacts | | | | |
| What we will achieve | Changes being introduced | Market participants impacted | | |
| The aim of this phase | Equities Clearing System - ECS (First Phase): | Phase 2 market impact is very low, with | | |
| is to implement a | Implement a new JSE clearing system to | main focus on internal JSE systems. | | |

more integrated and automated IT platform to enable the move to T+3. This is being done primarily through the introduction of changes to the current BDA system and the introduction of the new ECS system.

replace the existing Trade Monitoring System. This new system will provide all the current functionality and new enhancements, including the removal of the following clearing and settlement functionality from the BDA system:

- Creation of settlement instructions to the CSD
- Netting of prop and controlled clients (netting of settlements at EOD T+2)
- Risk Management (coverage of prop and controlled deals, commits by CSDP and margining at EOD T+3)

• BDA Enhancements:

- Real time Deal Management (allowing for real-time trade confirmation, settlement instructions and commits by the CSDPs)
- Automation for Brokers (i.e. Prime Broking, Corporate Actions and backoffice operations)

• Brokers:

- ECS: Brokers will be given viewonly access to the new system – to enable the monitoring of settlement
- BDA: shortening of trade execution timelines via real-time processes
- Previously manual back-office processes will now be automated

• Buy-side clients:

 They will now be encouraged to generate allocations as soon as possible (for submission to BDA) and send settlement instructions to their CSDPs

| 1131 HASE 3 Constituents and impacts | | | | |
|--------------------------------------|---|---|--|--|
| What we will achieve | Changes being introduced | Market participants impacted | | |
| The aim of this phase | Equities Clearing System – ECS (Second | Brokers: | | |
| is to move to the new | Phase): | ECS: Introduction of new | | |
| T+3 settlement cycle | Change of processing timelines to align | functionality and processing | | |
| across the market. | to the agreed T+3 settlement cycle (i.e. | timelines | | |
| This will be enabled | netting and margining will occur at EOD | BDA: changes to accommodate | | |
| by changes to the | T+1) | the T+3 settlement cycle including | | |
| JSE's ECS system at | Fails Management automation (to | Corporate Actions | | |
| the centre, and | accommodate the projected volumes | Previously manual back-office | | |
| process and systems | of failed trades that are expected by | processes will now be automated | | |
| changes made by the | the move to T+3 - with integration | Introduction of new and updated | | |
| rest of the market | across the market (Brokers, Strate, | processes to accommodate the | | |
| participants (covering | CSDPs and clients)) | move to T+3 | | |
| post-trade and post | | | | |
| settlement). | • <u>BDA:</u> | • Strate: | | |

T+3 PHASE 3 — Constituents and Impacts

- Further automation for Brokers (i.e. portfolio moves, account transfers, SLBs and Collateral)
- Change of processing timelines to align to the agreed T+3 settlement cycle (and the aforementioned ESC changes)

• External:

 Change of in-house systems and processes to align to the agreed T+3 settlement cycle

- 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

• CSDPs:

- 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
- Other automation such as offmarkets and SLBs

• Buy-side:

- 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

• Overseas counterparties:

- 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

Phase 1 of the T+3 project was implemented in July 2013.

Phase 2 of the T+3 project is due to be implemented Q4 2014.

Phase 3 of the T+3 project is under investigation and the timelines will be confirmed in due course.

4. Overall Description

4.1 Assumptions

The following assumptions were identified:

- Stakeholders at all the workshops, and those included in market surveys, were adequately represented, and that the required level of input and sign-off was achieved at the date this document was produced;
- The high level "Action plan Move to T+3" as documented and distributed by the JSE, has been sanctioned by all the market participants and stakeholders identified; and
- Where impact analysis is done as part of Phase 3 of the project, issues may be picked up which will need to be re-investigated the outcome of this process may change the findings and agreements as noted in the applicable documents. This may also impact on scope and timelines.

4.2 Dependencies

The following dependencies have been noted:

• The successful implementation of the JSE's T+3 Phase 1 and 2 of the project.

4.3 Constraints

• Phase 1 and 2 of the JSE's T+3 Project.

4.4 Existing Projects and Initiatives Impacting on this Specification

• The implementation of the T+3 Phase 2 of the T+3



5. Requirements Survey

5.1 Business Problem and Statement

South Africa, has fallen behind other global markets with regards to the T+5 settlement cycle as a processing time, while leading global markets have implemented T+3 and many are planning a move towards a T+2 (or shorter) settlement cycle. South Africa is in the process of positioning its economy to be attractive for foreign and local investment, as well as maintaining global best practice in the settlements cycle – with this in mind, an effort to shorten our settlement cycle needs to be undertaken.

The JSE, through its Post-Trade Services Division, has initiated the T+3 project which aims at moving the market to T+3.

6. Blueprint

6.1 Barrier 1: Dematerialisation

Definition

Since all equities trades are settled electronically through Strate, a high level of dematerialised securities is required to ensure availability of securities in the correct form to enable settlement to take place.

6.1.1 Issue

Risks

Activity

Market education must encourage shareholders to dematerialize their certificates by highlighting the risk of holding certificates and trading without certificates being dematerialized.

Outcome

The market has agreed that Dematerialization is not a barrier for the move to T+3.

6.1.2 Issue

Post Trade Validations

Activity

Investigate status intimations, starting from once the settlement allegement is received by the CSDP, advising the JSE Settlement Authority and the Broker of the reason why a settlement allegement has not been committed to.

Outcome

Market has agreed that the JSE should get status intimation updates throughout the settlement cycle.

A document entitled "Post Trade Validations" was completed and tabled at NMPG. The document was accepted in principle and it was also agreed that the MT 548 should be used for this purpose.

Responsible Party/ies

JSE and CSDPs - CSDPs will send the status intimations directly to the Brokers BIC code.



This will form part of the JSE's T+3 Phase 3.

6.2 Barrier 2: Straight-through Processing (STP)

Definition

The need for greater STP amongst all market participants, from the point of order capture through to final settlement, requires the adoption of uniform messaging standards by all market participants.

6.2.1 Issue

Standards to be agreed to

Activity

- Where current ISO15022 message standards do not adhere to global standards, the applicable messages have to be reviewed and moved to global standards;
- ISO15022 message standards must be agreed to and applied by the market as a whole. This
 includes going into lower account details for non-resident off-market transactions for matching
 purposes;
- Agreed ISO 15022 formats to go through the NMPG structure for approval; and
- Once ISO 15022 standards have been agreed to and implemented these must be sent to SMPG who will make this available on their website.

Outcome

It was agreed at NMPG that the focus would not be on user-defined messages as these are between local counterparties. The focus would be on the vanilla SWIFT messages.

Changes to the MT 54X for lower account details has been documented (referred to as the off-market exception handling), agreed and signed off by NMPG. It has been agreed that these changes will be implemented in the current T+5 environment due to the current inefficiencies.

Once the MT 54X messages have been implemented by the market, these messages (plus the current MT 51X and MT 56X) messages will be sent to SMPG for update to their website.

Responsible Party/ies

NMPG to monitor completion and forward to SMPG.

6.2.2 Issue

Real-time Processing

Activity

Move to real-time systems to cater for more real-time processing from trade execution to deal management to settlement.

Outcome

Due to the current market practice of bulking, averaging and allocating, it is not expected that we can get the Investment/Fund Managers to move to pre-allocation. However, they are to be encouraged to allocate as soon as possible after an order has been executed.

Discussions were held with the Investment/Fund Managers on a one-on-one basis where they have indicated that they are willing to bulk/average/allocate once an order has been filled.

JSE will move to real-time deal management as part of the JSE's T+3 Phase 2, which is due to go-live Q4 2014.

Investment/Fund Managers and other market players will be encouraged to allocate their deals in real-time in preparation for moving to a T+3 settlement cycle.

Responsible Party/ies

JSE and Investment/Fund Managers and other market participants.

6.2.3 Issue

Exception-based Processing

Activity

Investigate exception-based processing within the South African market to: a) escalate where there is a potential problem and b) reduce the amount of message flows.

Outcome

At Strate's Clearing & Settlement Market workshop, the market agreed that exception-based processing is not a prerequisite to move to T+3.(i.e.it is not a barrier). Therefore it will not be investigated further as part of the barriers and activities.

However, it was acknowledged that exception-based processing does lead to lower costs and does bring about other efficiencies. This will be investigated as a separate initiative.

Responsible Party/ies

Not applicable as it was agreed by the market that this is not a prerequisite to move to T+3.

6.2.4 Issue

SLB Automation

Activity

See Barrier 3 - Securities Lending and Borrowing.

Outcome

See Barrier 3 - Securities Lending and Borrowing.

Responsible Party/ies

See Barrier 3 - Securities Lending and Borrowing.

6.2.5 Issue

Corporate Actions Automation

Activity

See Barrier 4 - Corporate Actions.

Outcome

See Barrier 4 - Corporate Actions.

Responsible Party/ies

See Barrier 4 - Corporate Actions.

6.3 Barrier 3: Securities Lending & Borrowing

Definition

The more efficient the SLB functionality to book "same-day" lending and "same-day" returns, the quicker SLB transactions can be effected to prevent fails in a shorter settlement cycle

6.3.1 Issue

Corporate Actions

Activities

- Market education to be undertaken to reassure Lenders that a Corporate Actions entitlement, including any tax implications (dividend withholding tax), will be obtained and updated to their account per their lending agreement. This includes educating Lenders on the impact of recalls due to Corporate Actions. This may also necessitate changes to Lending Agreements; and
- Market education to be undertaken to advise Lenders that a Corporate Actions entitlement, may be loaned out from LDT+1 as long as the delivery coincides with the update of the entitlements to their custody accounts. As noted above, this may require system changes to participants systems.

Outcome

This is being driven through the South African Securities Lending Association (SASLA) where workshops will be scheduled and held with Lenders and paraphernalia created.

Responsible Party/ies

JSE and SASLA.

6.3.2 Issue

JSE Settlement Authority

Activity

Market education on the role of the JSE Settlement Authority as "lender of last resort" to encourage parties to loan securities to the JSE Settlement Authority.

Outcome

JSE to present on their role of lender as last resort to potential lenders to encourage them to loan securities to the JSE Settlement Authority.

JSE Settlement Authority.

6.3.3 Issue

More Lenders

Activity

Market education to encourage more Investors to either loan out more securities than they currently do (i.e. increase their lending limits) or encourage more Lenders. The focus here has to be the controls and risk mitigants that are in place to ensure that any loaned securities, and the fruits of such loaned securities, are guaranteed to be returned. This may also require changes to mandates or deeds in the case of Unit Trusts who are only permitted to loan out 50% of their assets.

Outcome

This is being driven through the South African Securities Lending Association (SASLA) where workshops will be scheduled and held with Lenders and associated paraphernalia created.

Responsible Party/ies

JSE and SASLA.

6.3.4 Issue

Same day Securities Lending & Borrowing and Returns

Activities

- Same day returns to be opened up to all Lending Desks (not restricted to Lending Desk Business Partners only).
- Strate Rule/Directive to be changed to allow same day Securities Lending & Borrowing. This should also be opened up to Lending Desk Business Partners as well as non-Lending Desk Business Partners.
- Review the Strate window period for returns which have to be done before 09h00 and committed before 10h00 on RD.

Outcome

The timelines have been agreed to for the JSEs T+3 Phase 3

JSE/Strate/CSDPs/SASLA

6.3.5 Issue

Automation of Security Collateral Movements

Activities

- Security collateral movements to be done on a same day basis as with Securities Lending & Borrowing and returns. No differentiation between Lending Desk Business Partners or non-Lending Desk Business Partners; and
- Security collateral to be automated through Strate's SAFIRES for Lending Desk Business Partners. This includes tracking of collateral and various reports.

Outcome

Strate have documented Business Requirement Specification's (BRS's) for collateral movements.

Strate have also implemented their Collateral Management System (CMS) in 2013.

Responsible Party/ies

SASLA/JSE/Strate/CSDPs

6.3.6 Issue

Proxy Voting

Activity

Borrowers must make their intentions known to the Lender or the agent before borrowing.

Outcome

This is being driven through the South African Securities Lending Association (SASLA) where workshops will be scheduled and held with Borrowers and paraphernalia created.

The market has agreed that Proxy Voting is not a barrier for the move to T+3.

SASLA

6.3.7 Issue

Automated Securities Lending & Borrowing Matching System

Activity

Investigate an automated Securities Lending & Borrowing Matching system which reflects available securities for lending/lending fees.

Outcome

Various solutions have been investigated in the past. Although the implementation of an automated Securities Lending & Borrowing Matching system brings about certain efficiencies there are several sensitivities around this.

The market has agreed that a SLB matching system is not a barrier for the move to T+3.

Responsible Party/ies

JSE/SASLA.

6.3.8 Issue

Corporate Actions on Securities Lending & Borrowing and Securities Collateral

Activities

- Automate the closing of outstanding Securities Lending & Borrowing transactions for the old securities
 and the raising of new Securities Lending & Borrowing transactions for the new securities. This includes
 the tracking of the old and new securities and the loan period for the payment of STT where the loan
 exceeds 12 months. This also applies to outstanding securities collateral as well; and
- Automate the raising of entitlements on outstanding Securities Lending & Borrowing and also tracking these through the SAFIRES system including various reports. The automation should include the Lender or their agent being able to elect on elective events and these details being passed onto the Borrower and the system tracking the entitlements. Any entitlements must be raised as a new Securities Lending & Borrowing which may be returned through the SAFIRES system as with any outstanding Securities Lending & Borrowing. This also applies to outstanding securities collateral as well.

Outcome

At Strate's SLB Business Partner committee meeting it was agreed that Strate would focus on Corporate Actions where there is a change to the mother share (which are non-elective events) i.e. name changes, scheme of arrangements, mergers, etc. Due to the complexities of entitlements and the way that SLBs are done in South Africa it was agreed that entitlements will continue to be processed as they currently are, (namely off-market).

Further workshops will be conducted by Strate to complete the BRS.

Responsible Party/ies

Not applicable as the market has agreed that this is not a prerequisite for the move to T+3.

6.4 Barrier 4: Corporate Actions

Definition

A shorter settlement cycle would also require the shortening of the corporate action cycle to LDT+3, which requires more efficient processes in order for investors to respond timeously on elective events.

6.4.1 Issue

Change the Corporate Action model

Activities

Investigate

- Compulsory Events which include the converting of securities;
- Compulsory Events which include payment of entitlements;
- · Compulsory Events with elections; and
- Elective Events.

Outcome

Various workshops instigated by Strate's Corporate Action Workgroup were held and the new Corporate Action model has been agreed and signed off by the market.

Responsible Party/ies

Strate/JSE/CSDPs.

6.4.2 Issue

Align to Global Best Practice

Activity

Investigate the Corporate Action models used by the London, Canadian and Australian stock markets.

Outcome

Various workshops under Strate's Corporate Action Workgroup were held and the new Corporate Action model was agreed and signed off by the market.

Responsible Party/ies

Strate/JSE/CSDPs

6.4.3 Issue

Rounding convention for fractional entitlements

Fractions will always be rolled down with a cash payment for the fraction (as opposed to the current market requirement of rolling up if 0.50 or above or rolling down if 0.49 or below) which will eliminate the necessity for spreadsheets down to beneficial owner level for calculation purposes.

Activity

Market (brokers and CSDPs) to agree to this change and speak to Issuers about rounding down of fractions with a payout of cash for the fraction.

Outcome

With the drive to eliminate spreadsheets (which is considered a major enabler for the move to T+3) modelling was done and it was agreed that if we roll down and pay a fraction, no or small losses will be incurred by the CSDPs and/or brokers. Therefore the recommendation has been made to round down and pay a fraction.

This is also considered a possible quick win and can be implemented in the current T+5 settlement environment as opposed to waiting for T+3.

Refer to JSE's document relating to fractions and rounding down.

6.4.4 Issue

Automation of outstanding Corporate Action events

Activities

- Investigate and automate the Corporate Action events where applicable; and
- This includes Strate, CSDPs, Brokers and Clients.

Outcome

Under the investigations and discussions on the Corporate Action model it was agreed that the JSE equities members will have to fully automate. This has also been noted as a prerequisite for the move to T+3. The BDA system was enhanced as part of the JSE's T+3 Phase 1 implementation. Further enhancements will be done as part of the JSE's T+3 Phase 3 implementation.

CSDPs will deal directly with their institutional clients to enhance the automation of corporate actions.

Responsible Party/ies

Strate/JSE/CSDPs.

6.4.5 Issue

Strate's Corporate Action Automation Project

Activities

- Continue with Strate's Corporate Action Automation Project with the market;
- Link the "wish list" to Strate's Corporate Action Automation Project; and
- Link the current projects that have been put on hold to Strate's Corporate Action Automation Project.

Outcome

Strate implemented their automation project in Q1 2010.

Responsible Party/ies

JSE/Strate/CSDPs.

6.4.6 Issue

Standards

Activities

- Review current ISO 15022 standards used in South Africa and move to Global Best Practice;
- Post the South African ISO 15022 market practice standards on the SMPG website; and
- Get involved with the ISO 20022 standards definitions and ensure that South Africa deploys ISO 20022 as per Global Best Practice when made available.

Outcome

Once the entire MT standards have been agreed and documented these will be sent to SMPG for update to their website.

Responsible Party/ies

NMPG to monitor completion and forward to SMPG.

6.4.7 Issue

Spreadsheets

Activities

- Get agreement on the current format of spreadsheets to ensure that only one format is used to allow for the automatic generation of the spreadsheet; and
- Investigate and analyze different solutions available for the transport of the spreadsheets to Strate
 and/or the Issuer's agent to allow guaranteed delivery and better security. The investigations will include
 SWIFT (ISO 15022 and ISO 20022), FileAct and SWIFT e-mail. However, cost must be taken into
 consideration.

Outcome

With the drive to eliminate spreadsheets (which is considered a major enabler the move to T+3) modelling was done and it was agreed that if we round down and pay a fraction no or small losses will be incurred by the CSDPs and/or brokers. Therefore the recommendation has been made to roll down and pay a fraction.

This is also considered a possible quick win and can be implemented in the current T+5 settlement environment as opposed to waiting for T+3.

Responsible Party/ies

Refer to JSE's document relating to fractions and rounding down.

6.4.8 Issue

Standards/Automation/Market buy-in

Activities

- Educate the market, including clients, CSIG and sponsors on the message standards deployed in South Africa and encourage them to implement same; and
- Get market buy-in and encourage clients to automate their solutions.

Outcome

Will be part of the Market Education and Marketing.

Responsible Party/ies

This will form part of the Communication and Market Education to be undertaken by the JSE, Strate and CSDPs.

6.4.9 Issue

Freeze Period for Removals

Activity

Speak to the Issuing Companies where the primary listing is offshore and encourage them to reduce the freeze period to a shorter period.

Outcome

Discussions have been held with various parties and it has been agreed that the Finalisation Date (FD) of the rand conversion can be on LDT -1 which should reduce the freeze period of the registers.

Responsible Party/ies

Refer JSE's document relating to Freeze Period for Removals. JSE to discuss with dual and inward listed companies.

6.4.10 Issue

JSE to enforce Listing Requirements

Activity

- JSE to enforce Listings Requirements and enforce sanctioning where these are not adhered to; and
- Where there are differences or conflicts between Listing Requirements with dual listed companies where the lead regulator is offshore, such differences should be highlighted to the market.

Outcome

Will form part of Phase 3 – Document to be created confirming differences.

Responsible Party/ies

JSE to complete a document detailing the differences in Listing Requirements between the various jurisdictions.

6.4.11 Issue

Changes to Listing Requirements

Activity

Workshops to be set up with the market and the JSE Issuer Services Division to discuss and agree new requirements.

Outcome

Various workshops instigated by Strate's Corporate Action Workgroup were held and the new Corporate Action model was agreed and signed off by the market.

A document entitled "T+3 – Blueprint for barriers and sub-barriers assigned to Strate" was created by Strate.

The document will be supplied to the JSE Issuer Services to review and confirm if any changes are required to the Listing Requirements.

Will form part of impact analysis of the JSEs T+3 Phase 3.

The changes to the Listing Requirements will go through their normal cycle.

6.4.12 Issue

Corporate Action events

Activity

Educate the market, including clients, CSIG and sponsors on the various Corporate Action events and the processes and procedures thereof. This could include a handbook which is published to the market.

Outcome

This will form part of the Communication and Market Education to be undertaken by the JSE, Strate and CSDPs.

Strate to create a dummy guide to Corporate Actions

Responsible Party/ies

This will form part of the Communication and Market Education to be undertaken by the JSE, Strate and CSDPs.

6.4.13 Issue

Corporate Action information

Activities

- Issuers to be encouraged to make circulars available on their or a vendor's website; and
- The website solution should allow some form of data mining as well, where Investors are able to go back in time to review past circulars and announcements.

Outcome

Most if not all Issuers make their circulars available on their website or a vendor's website.

Listing Requirements have also been changed to facilitate electronic communication to shareholders (except for mergers).

The areas still to be addressed:

- Issuing Companies still need to change their memo and articles of association; and
- Market has to come up with a solution to allow Issuing Companies to get their shareholders' consent to electronic communication and release of information.

Responsible Party/ies

Refer JSE's document relating to electronic communication. JSE to discuss with the Issuing Companies.

6.4.14 Issue

Off-market transactions

Activity

Reduce the freeze period between LDT+1 and RD.

Outcome

Various workshops under Strate's Corporate Action Workgroup were held and the new Corporate Action model was agreed and signed off by the market.

Responsible Party/ies

This has been implemented.

6.4.15 Issue

Securities Lending & Borrowing (SLB)

Activity

Investigate the impact of same day Securities Lending & Borrowing and returns on RD with the new Corporate Action event timelines. This may involve the introduction of system functionality and new Strate Rule's and Directives to stop the booking of the same day transaction after 09h00 on RD.

Outcome

The timelines have been agreed to for the JSEs T+3 Phase 3



Strate/JSE/CSDPs/SASLA and other market participants to conduct an impact analysis and the required development to systems.

6.5 Barrier 5: Systems Availability

Definition

While a shorter cycle reduces settlement risk, it increases operational risk, so the resilience required of all participants' systems is greater with less time for recovery

6.5.1 Issue

Business Continuity Plans

Activities

- Market workshops to be set up to discuss the impact of System Availability within the T+3 settlement cycle and the Business Continuity Plan activities required to be driven by each participant, JSE and Strate depending on the day within the settlement cycle;
- Business Continuity Plans to be updated per the discussions and agreements reached with the market workshops; and
- The Business Continuity Plans to be compared to other Business Continuity Plans drafted by other stakeholders (PASA/SARB, etc) to ensure that there are no conflicts.

Outcome

It was agreed that this would be moved to Phase 3 as this cannot be completed until the impact analysis for all the changes for the move to T+3 has been completed.

Responsible Party/ies

Strate (Supervision) to complete the exercise with all stakeholders.

6.6 Barrier 6: Moving Shares between Registers

Definition

For dual listed securities, the moving of shares between registers (e.g. London to Johannesburg) needs to be more automated to avoid fails on the delivery in order for settlement to take place.

6.6.1 Issue

Educate the foreign clients that (where there is arbitrage between foreign markets and South Africa) they may have to enter into a Securities Lending & Borrowing arrangement to ensure that settlement takes place.

Activity

Educate the foreign clients and ensure that there is an efficient and effective Securities Lending & Borrowing market.

Outcome

Refer to Securities Lending & Borrowing Barrier 3.

Responsible Party/ies

Refer to Securities Lending & Borrowing Barrier 3.

6.6.2 Issue

Enforce JSE Rules

Activities

- Market education on JSE Rules specifically the pre-trade requirement of a satisfactory borrowing arrangement prior to execution; and
- Enforce the JSE Rules regarding a satisfactory borrowing arrangement. Possibly look at adding a further Rule which specifically refers to moving shares between registers, i.e. arbitrage transactions.

Outcome

This will form part of the Communication and Market Education to be undertaken by the JSE, Strate and CSDPs.

JSE to update and publish the Settlement Obligations document.

Responsible Party/ies

This will form part of the Communication and Market Education to be undertaken by the JSE, Strate and CSDPs.

6.6.3 Issue

Removal processes

Activity

Investigate the various removal processes between foreign jurisdictions and South Africa and document any inefficient processes.

Global market education on the process of removals and impact on settlement if removals are not done timeously. This includes foreign Transfer Secretaries, foreign brokers, foreign clients as well as local stakeholders.

Outcome

Meetings still to be set up with the Transfer Secretaries to discuss automation of the removals between other markets.

JSE is focusing on the other removals linked to Inward Listed Securities. Part of this process is to ensure that securities are available for SLB to oil the transaction until the securities are removed to the South African register.

Responsible Party/ies

JSE to meet with other Transfer Secretaries to refine the process.

This will form part of the Communication and Market Education to be undertaken by the JSE, Strate and CSDPs.

6.7 Barrier 7: Providing Settlement Assurance

Definition

Under a T+3 settlement cycle, the 99.99% settlement rate for all on-market transactions which the JSE Settlement Authority has achieved since Strate commenced, will require a review of cut-off times and processes.

It is also expected that with the move to the T+3 settlement cycle more fails will occur. Systems need to cater for up to 6% of settlement failing on a daily basis.

6.7.1 Issue

One of the requirements for the implementation of Phase 3 of the T+3 settlement cycle is the need to look for more automation within the Failed Trade processing which includes Rolling Of Settlement, Retransactions and Compensation. This is referred to the Failed Trades Procedures.

Activities

- Investigate and design automated Failed Trade Procedures;
- Consult with the market to get sign-off and ensure market buy-in; and
- Change JSE's and Strate's Rules and Directives to facilitate the Failed Trade Procedures.

Outcome

Refer to JSE Failed Trade Procedures document

Responsible Party/ies

JSE/Strate/CSDPs/ Clients

6.7.2 Issue

Enable full automation of Deal Allocations through different applications

Activities

- o Investigate and implement full automation of Deal Allocations through different applications; and
- o Consult with the market to get sign-off and ensure market buy-in.

Outcome

The BDA system does cater for allocations via:

- FTP
- SWIFT MT 514 (ISO15022)

Responsible Party/ies

JSE

6.7.3 Issue

Enable Automation of Loading of New Accounts

Activities

- Investigate and implement automation of Loading of New Accounts; and
- Consult with the market to get sign-off and ensure market buy-in.

Outcome

The BDA System does cater for clients' accounts via FTP

6.7.4 Issue

Allow further back-to-back links to be created between trade types and off-markets and review the timings

Activities

- Revisit back-to-back links and timings on SAFIRES;
- Introduce further back-to-back links for future settlement dates; and
- Consult with the market to get sign-off and ensure market buy-in.

Outcome

Refer to the JSE Failed Trades Procedures document.

Responsible Party/ies

JSE/Strate/CSDPs/Clients.

6.7.5 Issue

<u>Local and global markets will need to understand the changes to the timelines and activities and their involvement therewith</u>

Activity

Local and global market education on the changes to timelines and activities and their involvement therewith.

Outcome

This will form part of the Communication and Market Education to be undertaken by the JSE, Strate and CSDPs.

Responsible Party/ies

This will form part of the Communication and Market Education to be undertaken by the JSE, Strate and CSDPs.

6.8 Barrier 8: Central Securities Register

Definition

Since the debate on a central securities register arising from the development of a Securities Ownership Register (SOR) for the Money Market Initiative, some believe that it is a pre-requisite to moving to T+3.

6.8.1 Issue

The market should move to a CSR to facilitate T+3

Activity

It was debated by the market whether a CSR was a prerequisite to move to T+3.

Outcome

It was agreed by the market that a CSR is not a prerequisite to move to T+3 and furthermore that such investigations would not form part of the scope of this project.

Responsible Party/ies

Not applicable as it was agreed by the market that a CSR is not a prerequisite to move to T+3.

6.9 Barrier 9: Off-market Transactions

Definition

The dependency on off-market transactions not failing often has a critical impact on the settlement of on-market transactions and more alignment of settlement processes is needed.

6.9.1 Issue

JSE Settlement Authority unable to view off-markets and links to on-markets

Activity

Back-to-back links to be reported to the JSE so that the JSE can see the links.

Outcome

Refer to the JSE Failed Trade Procedures document

Responsible Party/ies

JSE/Strate/CSDPs/Clients

6.9.2 Issue

Standards to be agreed

Activities

- Where current ISO15022 message standards do not adhere to global standards, the applicable messages have to be reviewed and moved to global standards;
- This includes going into lower account details for non-resident off-market transactions for matching purposes. ISO15022 to go through the NMPG structure for approval; and
- Once ISO15022 standards have been agreed to and implemented these must be sent to SMPG who will make this available on their website.

Outcome

Once the MT 54X messages have been approved by NMPG, these plus the current MT 51X and MT 56X messages will be sent to SMPG for update to their website.

Responsible Party/ies

NMPG to monitor completion and forward to SMPG.

6.9.4 Issue

Enhance SAFIRES functionality

Activity

Create further back-to-back functionality for all on-market and off-market transactions.

Outcome

Refer to the JSE Failed Trade Procedures document.

Responsible Party/ies

JSE/Strate /CSDPs/Clients.

6.9.5 Issue

Off-markets done for certain Corporate Action entitlements

Activity

Automate the processing of all Corporate Action entitlements.

Outcome

Strate have instigated a Corporate Action Enhancement Project which went live Q1 2010.

Further, under the investigations and discussions on the Corporate Action model it was agreed that the JSE equities members will have to automate a lot more than currently done on BDA. This has also been noted as a prerequisite for the move to T+3

Changes were implemented to BDA as part of the JSEs T+3 Phase 1. Further enhancements will also be done as part of the JSEs T+3 Phase 3

Responsible Party/ies

JSE/Strate/CSDPs.

6.9.6 Issue

Account transfers and portfolio moves cannot be done between LDT+1 and RD

Activity

Allow Account Transfers and Portfolio Moves to be done between LDT+1 and RD for non-elective events.

Outcome

Implemented.

Responsible Party/ies

Strate/JSE/CSDPs.

6.9.7 Issue

<u>Inter-CSDP Account Transfers, Portfolio Moves and Depository Receipts cannot be done for same-day settlement</u>

Activity

Allow Inter-CSDP Account Transfers, Portfolio Moves and Depository Receipts to be done for same-day settlement.



Outcome

The timelines have been agreed to for the JSEs T+3 Phase 3.

Responsible Party/ies

Strate/JSE/CSDPs.

6.9.8 Issue

Local and global market will need to understand the changes to off-markets

Activity

Local and global market education on the changes to off-market transactions.

Outcome

This will form part of the Communication and Market Education to be undertaken by the JSE, Strate and CSDPs.

Responsible Party/ies

This will form part of the Communication and Market Education to be undertaken by the JSE, Strate and CSDPs.

6.10 Barrier 10: Real-Time Trade Processing

Definition

The systems will need to cater for Real-Time Processing in order to achieve the T+3 Settlement Cycle.

6.10.1 Issue

Systems need to allow for on-line daily processing

Activity

Investigate what functionality should be moved to on-line daily processing and what should be kept as batch processing — this includes CSDPs and Transfer Secretaries

Outcome

Market has agreed to real-time messaging where required.

The timelines have been agreed to for the JSEs T+3 Phase 3

Responsible Party/ies

JSE/Strate/CSDPs.

7. Phase 3

Phase 3 of the project involves the impact analysis for the changes to all market participants systems and the implementation plan. This Phase will drive out:

- System development and time required;
- Testing requirements and time required;
- Communication and Market Education requirements; and
- Go-live date.

All of the documents as noted and referred to throughout this document will be made available through the JSE's website.



8. Glossary

This glossary defines all terms, abbreviations and acronyms that are new, business specific and required to interpret this document.

| Term | Description |
|----------------------|---|
| "API" | means Application Protocol Interface. A means to get data into a system. |
| "ASISA" | means Association for Savings & Investment South Africa. |
| "back-to-back link" | means the functionality which links two orders when the delivery of Securities is |
| | dependent upon the successful receipt of the same Securities. |
| "barriers" | means the barriers as defined by CSAC for the move to T+3. |
| BDA | Means Broker Deal Accounting system |
| "BCP" | means Business Continuity Plan. |
| "BRS" | means Business Requirements Specification. |
| "Corporate Action | means a project instigated by Strate to enhance the current system for Corporate |
| Enhancement Project" | Actions. |
| "CAWG" | means the Corporate Actions Working Group a sub-committee of Strate's Equities |
| | Working Committee. |
| "collateral" | means a transaction where Securities are transferred by a Collateral Provider to a |
| | Collateral Taker under a Collateral Agreement. |
| "collateral return" | means a transaction where Securities are returned by the Collateral Taker to the |
| | Collateral Provider under a Collateral Agreement. |
| "corporate action" | means an action taken by an issuer or any other entity or third party, which affects |
| | the registered owner and the beneficial owner of equity securities in terms of an |
| | entitlement. |
| "clearing" | means the process, in conjunction with settlement, of determining accountability |
| | for the exchange of funds and securities between counterparties to a trade. |
| | Clearing creates binding statements of obligation for the movement of securities |
| | and funds. Clearing is the taking of a trade from a trade shape to a settlement |
| | shape for settlement and risk management by the JSE of the trade until settlement. |
| "CSAC" | means the JSE's Clearing & Settlement Advisory Committee an independent |
| | Committee as set up as per the JSE's Rules. |
| "CSD" | means Strate Limited licensed as a Central Securities Depository in terms of the |
| | Securities Services Act. |
| "CSDP" | means a Central Securities Depository Participant which is accepted by Strate as a |
| | participant in terms of the Securities Services Act and the Strate Rules. |
| "CSIG" | means Company Secretaries Interest Group. |
| "CSR" | means Central Securities Register. |
| "dematerialization" | means the process of converting a certificated equity security into an uncertificated |
| | equity security. |
| "elective event" | means a Corporate Action that takes place with action required on the part of the |
| | holder of the Security, and where the benefits that accrue to owners of Securities |

| Term | Description |
|-------------------------|---|
| | are not automatically disbursed by the Issuer but require an election to be made in |
| | line with the terms of the Corporate Action. |
| "ECS" | means Equities Clearing System, the system that will be used by the Settlement |
| | Authority to monitor and manage settlement of equity securities per the JSEs Rules |
| | and Directives. |
| "EWC" | means Strate's Equities Working Committee. |
| "FIX" | means Financial Information eXchange the protocol used from pre-trade to |
| | allocation. |
| "FTP" | means File Transfer Protocol, a format for files to be uploaded to a system. |
| "ISO" | means International Standards Organisation (ISO), the international federation of |
| | standardisation bodies for various industries, which seeks to set common |
| | international standards in a variety of fields. |
| "JSE" | means JSE Limited, a public company incorporated in accordance with the laws of |
| | the Republic of South Africa, with registration number 2005/022939/06, licensed to |
| | carry on the business of an exchange in terms of section 8 of the Securities Services |
| | Act, No. 36 of 2004. |
| "JSE equities member" | means an entity admitted to membership of the JSE under the JSE's Equities Rules. |
| "JSE Rules" | means the rules and directives of the JSE, as amended from time to time. |
| "LDT" | means Last Day to Trade, which is the last date that anyone can trade on-market in |
| | order to qualify or participate in a Corporate Action. |
| "MT" | means Message Type. Terms used with SWIFT Message Types. |
| "NMPG" | means the National Markets Practice Group, a sub-committee of the Securities |
| | Market Practice Group. |
| "OTC" | means Over-The-Counter and is also referred to as "off-markets". |
| "PASA" | means Payment Association of South Africa. |
| "PMO" | means Pay Money Only, the delivery of cash without the delivery of securities. |
| "real-time" | means computer output in an immediate time frame. |
| "RD" | means Record Date, the date on which the holdings, upon which the Corporate |
| | Action entitlement is based, are ascertained. RD is equal to LDT+5. |
| "SAFIRES" | means Southern African Financial Instruments Real-time Electronic Settlement |
| | system, the clearing, settlement and depository system used by the CSD. |
| "SAMOS" | means the South African Multiple Options Settlement system, the national payment |
| | system established and operated by the South African Reserve Bank. |
| "SARB" | means the South African Reserve Bank. |
| "SASLA" | means the South African Securities Lending Association. |
| "settlement" | means the completion of a transaction, whereby securities and corresponding |
| | funds are delivered and received in the applicable clients and brokers accounts. |
| "settlement allegement" | means a settlement instructions sent by Strate for settlement |
| "Settlement Date (S)" | means settlement date, the day on which a transaction in a particular Security is |
| | settled through the CSD. |
| "Settlement Authority" | means the person or persons appointed by the JSE to manage the settlement of |

| Term | | Description | | |
|--------------------|--------|---|--|--|
| | | transactions in equity securities effected through the JSE equities trading system in | | |
| | | terms of the rules and directives. | | |
| "settlement commit | ment" | means an electronic undertaking by a CSDP to settle a transaction in equity | | |
| | | securities. | | |
| "Securities Len | ding & | means an arrangement in terms of which a person (lender) lends Securities to | | |
| Borrowing" | | another person (borrower) subject to the borrower agreeing to return the loaned | | |
| | | Securities within a certain time period. Once the loaned Securities have settled, | | |
| | | ownership and other rights attached to the Securities are transferred to the | | |
| | | borrower. The borrower has the right to sell or re-lend the (borrowed) Securities | | |
| | | during the life of the loan. In return, the borrower agrees to compensate the | | |
| | | lender for any distributions in respect of the Securities which that lender would | | |
| | | have been entitled to receive during the period had the arrangement not been | | |
| | | entered into. | | |
| "Securities Len | ding & | means the return of Securities which had been loaned in terms of a Securities | | |
| Borrowing return" | | Lending and Borrowing Transaction. | | |
| "STP" | | means Straight-Through-Processing. | | |
| "Strate" | | means Strate Limited, a public company incorporated in accordance with the law | | |
| | | of the Republic of South Africa, with registration number 1998/022242/06 and | | |
| | | which is a Central Securities Depository in terms of the Securities Services Act, No. | | |
| | | 36 of 2004. | | |
| "SWIFT" | | means Society for Worldwide Inter-bank Financial Telecommunication a global | | |
| | | communication network. | | |
| "T" | | means Trade Date, the date that a trade is executed on the trading system. | | |
| "XBRL" | | means eXtensible Business Reporting Language. | | |