

JSE Software Provider Forum Q2 2021/05/06

Meeting Date: 06 May 2021

Meeting Time: Call: 13:00 to 14:00

Meeting Venue: Webinar (Please see attached guide)

Join on your computer or mobile app

[Click here to join the meeting](#)

Or call in (audio only)

[+27 11 076 8393,,482125504#](#) South Africa, Johannesburg

Phone Conference ID: 482 125 504#

[Find a local number](#) | [Reset PIN](#)

[Learn More](#) | [Meeting options](#)

Meeting Duration: 1 Hour

Subject: JSE Software Provider Forum Q2

let's connect

Regards

Langa Manjele

Head: Equities and Equity Derivatives

Capital Markets

+27 11 520 7360

+27 82 295 9840

Langam@jse.co.za

let's connect

JSE Limited • One Exchange Square • Gwen Lane • Sandown • South

Africa

www.jse.co.za



Kind regards,

Wesley Kandasamy

Technical Manager

Capital Markets and Group Strategy

T +27 11 520 7777

D +27 11 520 7580

C +27 63 757 3802

E wesleyk@jse.co.za

let's connect

JSE Limited • One Exchange Square • Gwen Lane • Sandown • South

Africa

www.jse.co.za

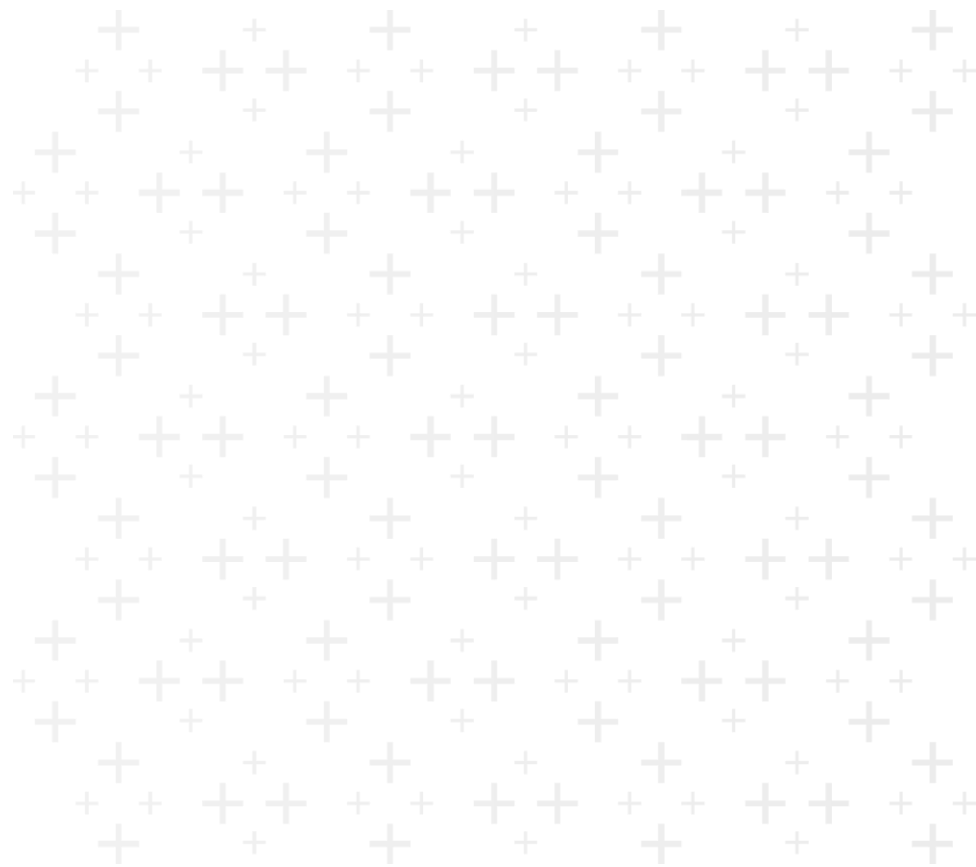


Agenda

1. Welcome		2
• Langa Manqele	– 5Min	
2. Market Data		3
• Neil Vendeiro	– 5Min	
3. Trading – Enhancements		9
• Godfrey Matjuda, Andrea Maisel, Hlamalani	– 10Min	
4. Post Trade		11
• Vaneshri Chetty, Megan Davids	– 15Min	
5. Trading		20
• James Rakumako	– 5Min	
6. Diesel		22
• Zintle Dastile	– 5Min	
7. Custom Password Policies in Systems		25
• Ishen Prithipal	– 15Min	
General and Questions		30

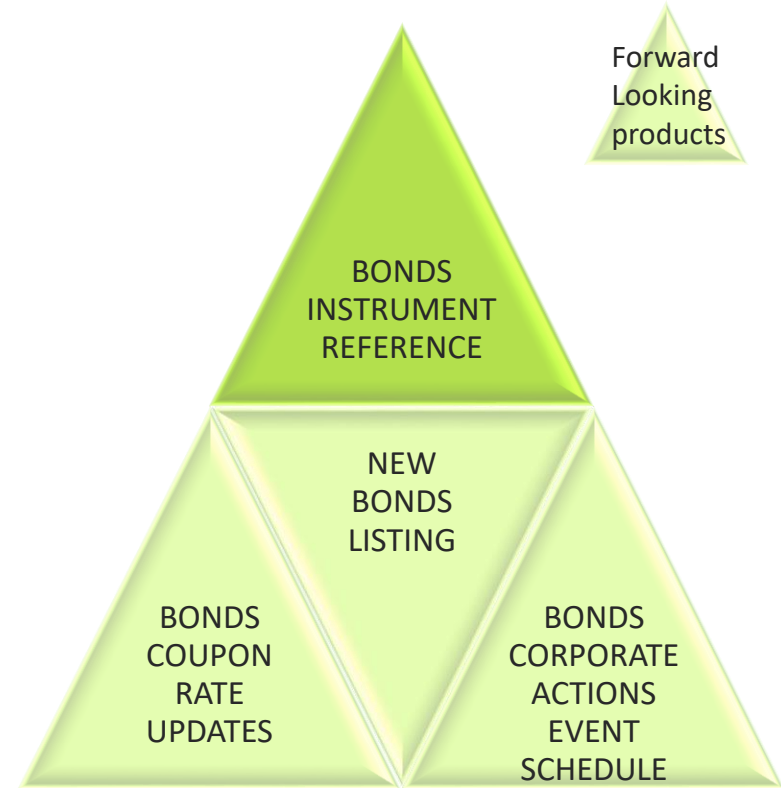
2. Market Data

- Neil Vendeiro



Bonds Reference Data and Corporate Actions Product Family

- New family comprises one “now” reference data view and three “forward looking” views that will impact reference data
- Arises from a long term multi-year project to centralise management of reference data in one solution (branded as Aurum)
- Aside from the efficiency benefit of centralised maintenance, other key benefit will be move to structured data to help reduce own and client complexity and effort
- Bonds is first phase with other asset classes tackled over time but timings not yet firmed.



Bonds Reference Data and Corporate Actions Product Family

- Enhanced replacement of Bonds Database product
- Only covers listed Bonds
- CSV and Excel versions
- Already available in production mode via IDP
- Will replace a range of content published via market notices

- Replacement of market notice content rather than current product replacement Once

Bonds
Instrument
Reference

New Bonds
Listing

Bonds
Coupon Rate
Update

Bonds
Corporate
Actions Event
Schedule

- Replacement of market notice content rather than current product replacement Once Bond listed moves over to Bond Instrument Reference
- Exact same product layout as Bond Instrument Reference data product
- Published multiple times in day

- Replacement of market notice content rather than current product replacement Once

Bonds Reference Data and Corporate Actions Product Family

Bonds Instrument

Data product announced on 23 Nov 2020.

Cut-over date, based on client requests extended - 3 August 2021.

Product is already available in production mode via IDP.

Working on some enhancements based on client feedback and will provide details and implementation date via a notice in this month with revised specifications

Other 3 products

Other three data products technically ready.

Specifications are available but commercials are still being finalised.

Happy to provide specifications on request and access to production files ahead of official notice.

Other 3 products

The four data products will replace the relevant Bonds related market notices issued by the JSE and that will be discontinued.

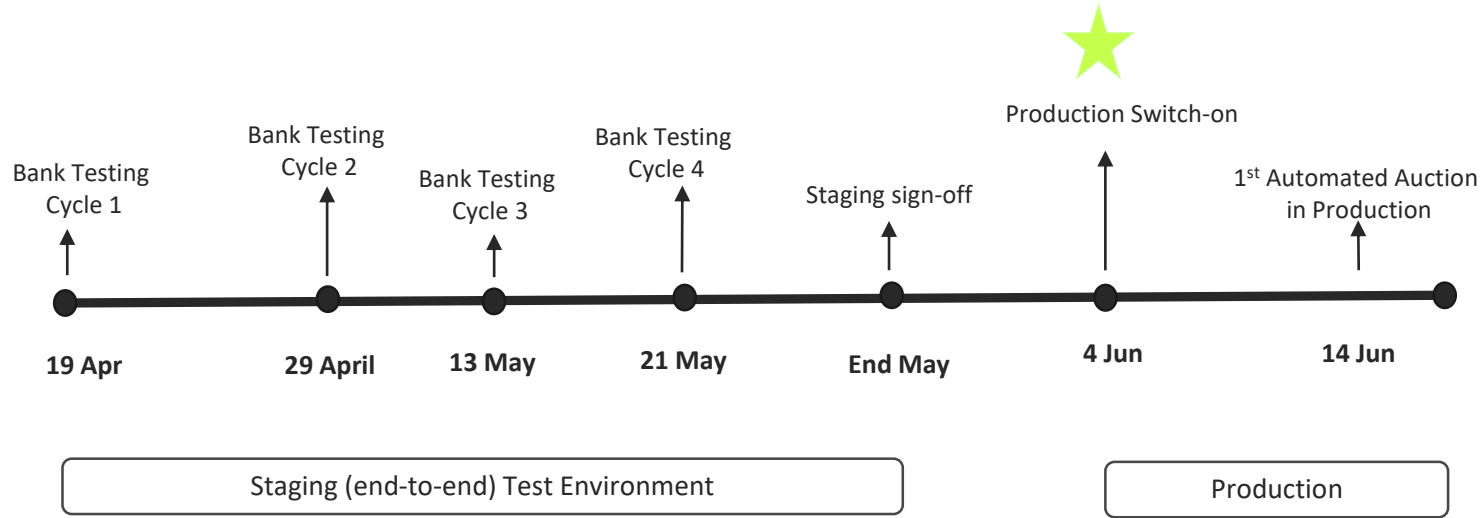
We will provide clarity on which type of notices will be discontinued.

Reasonable notice period will be provided for move from unstructured (market notices) to structured data (data products).

3. Trading Enhancements

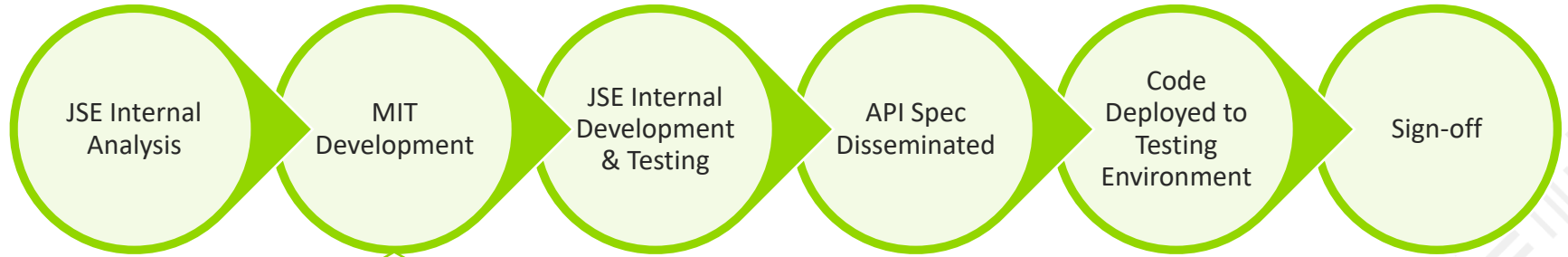
- Andrea Maisel
- Godfrey Matjuda
- Hlamalani Huhlwane
- Martin Koch

FX Auction Automation



* Other test dates available: 6 May and 27 May

Delayed Block Trade



Current status

- Requirements signed off
- Market Regulations consultation completed
- MIT development started
- Code expected: middle July 2021

JSE Monthlies at EoD

JSE Monthlies at EoD

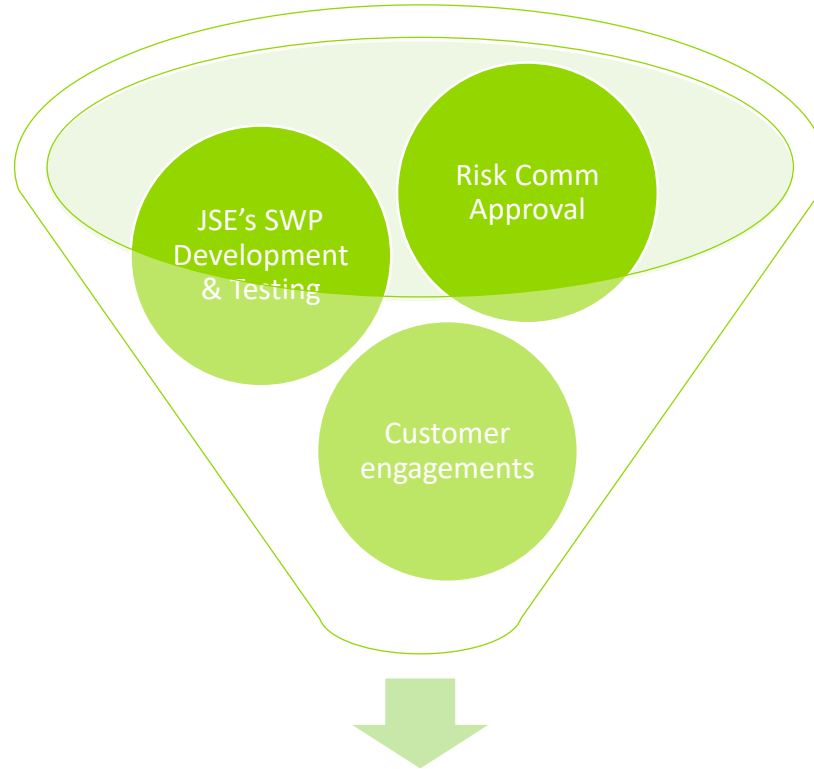
Expected go-live: **July 2021**

- **JSE Requirements have been completed**
- **Development has started**
- **No API impact**
- **Member impact expected on:**
 - **Price publication (Exercise/Abandon window)**
 - **Web report**
- **SLA's to be communicated in due course**

4. Post trade

- Vaneshri Chetty
- Megan Davids

Diesel



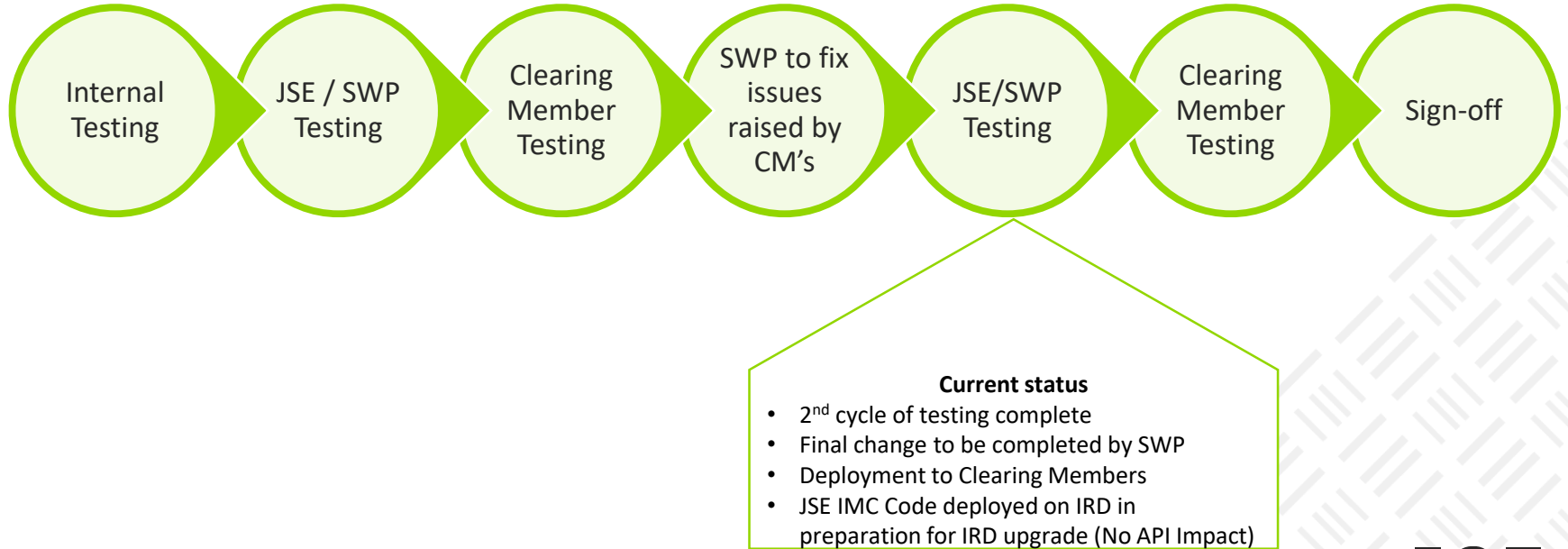
JSE is on track to receive the diesel code – Second Week May 2021

JSE internal testing to begin – last week May 2021

API Spec will be released to all SWP's – Beginning June 2021

Code will be available in test environment – End June 2021

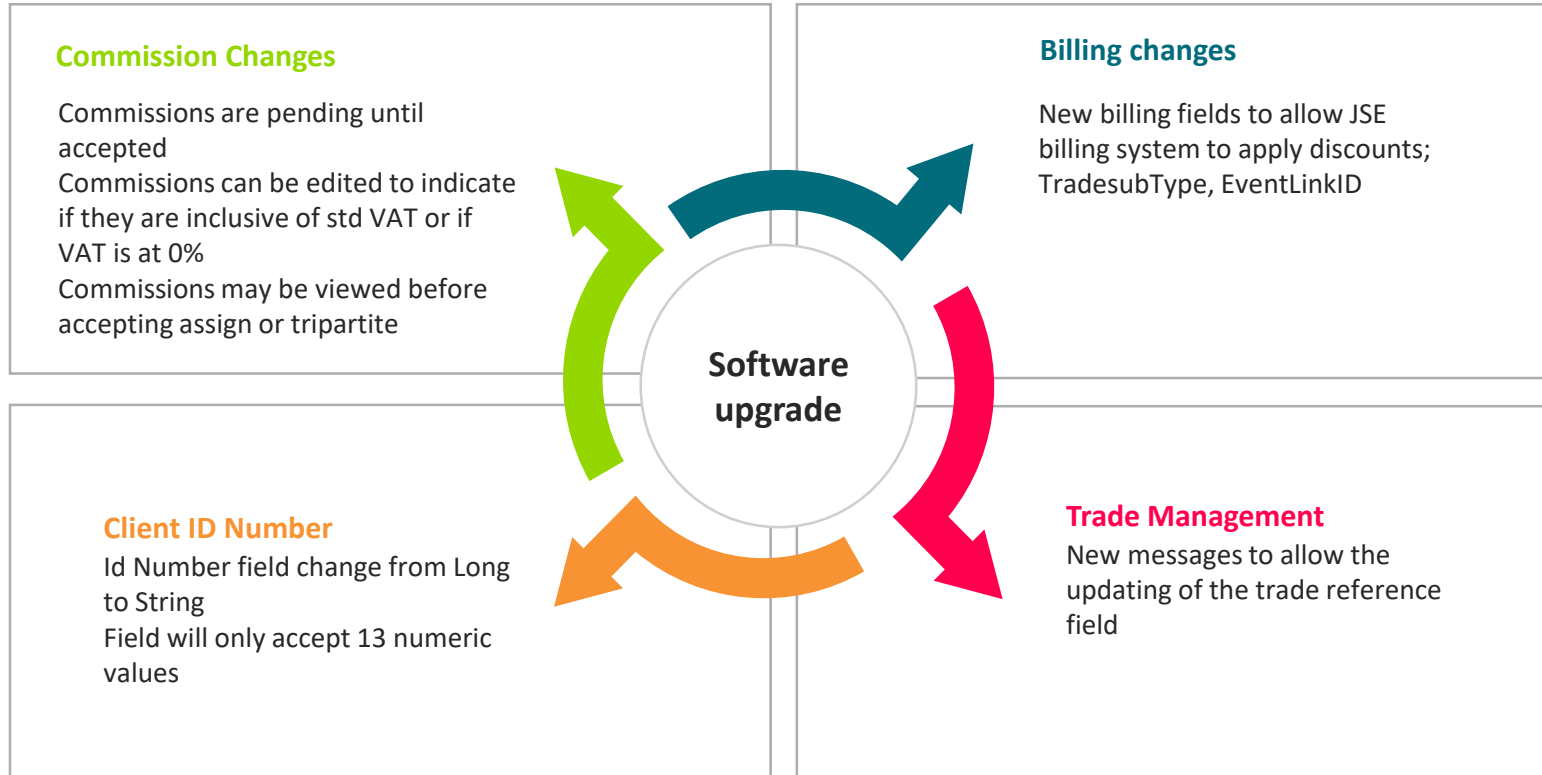
Intra-day Margin Call – Derivative Markets



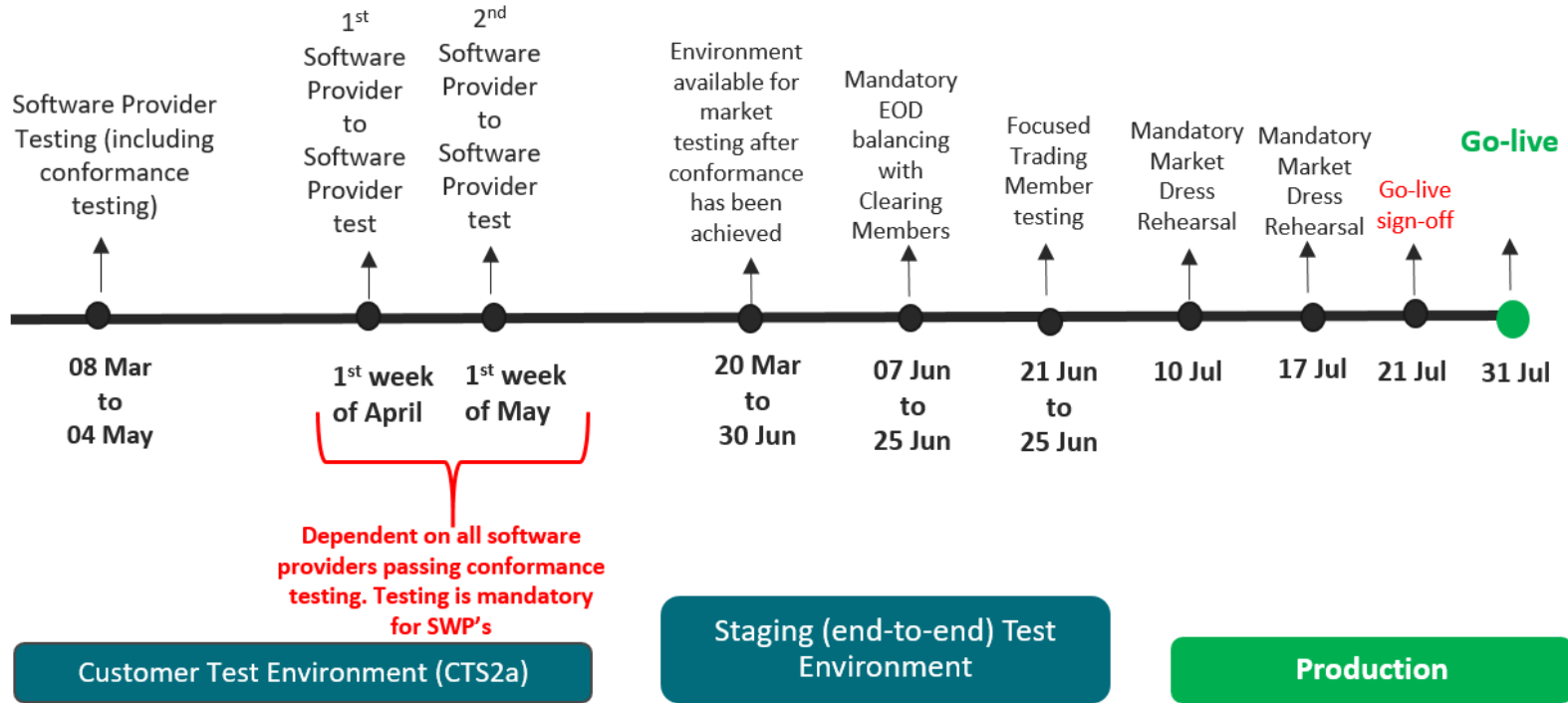
Other Items that will affect Clearing and Settlement

- MIT Upgrade FX Auction Automation
- IR System Upgrade

RTC 1.34 Upgrade



RTC 1.34 Upgrade Timeline



RTC Hardware Upgrade

RTC system hardware due for an upgrade to latest technology (Production & Test environments)
Routine refresh as hardware reaches end of support cycle from vendor

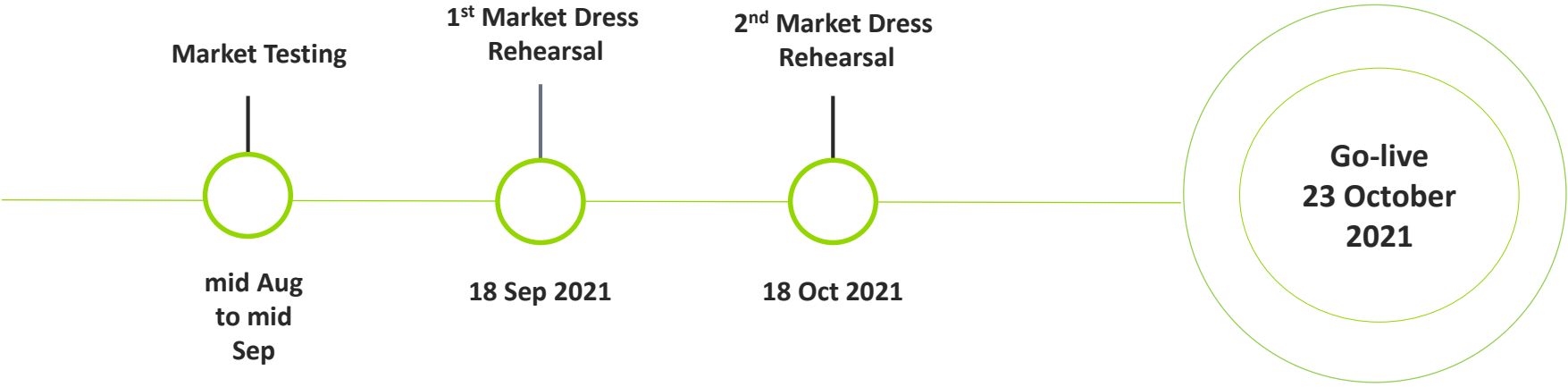
Solution design complete, hardware has been procured

Software provider, member/clearing member testing required prior to go live
Market facing cutover dress rehearsals and go live



**RTC
version
1.35**

RTC Hardware Upgrade Provisional Timeline



On our Radar...Non-cash and FX Collateral

FX Collateral	Securities Collateral
<ul style="list-style-type: none">• Internal business process design for accepting non ZAR cash collateral in progress• Real Time Clearing system is ready to accept FX collateral, end to end testing pending to confirm all capabilities (not included in ITaC project end to end testing)	<ul style="list-style-type: none">• Some testing done during ITaC implementation phase• Outstanding software enhancements required from RTC vendor• Legislation changes to Insolvency Act pending (no confirmed date) before end to end testing and implementation will commence

5. Trading – Neutron Releases

- James Rakumako

Nutron Post DIS Release - Timeline

- Fixes to be deployed into:
 - CTS Environments 10th May 2021
 - Production 11th June 2021
 - Fix includes a Non-API impacting enhancement (MT515 Contract Note)

7. Diesel – Contract Update

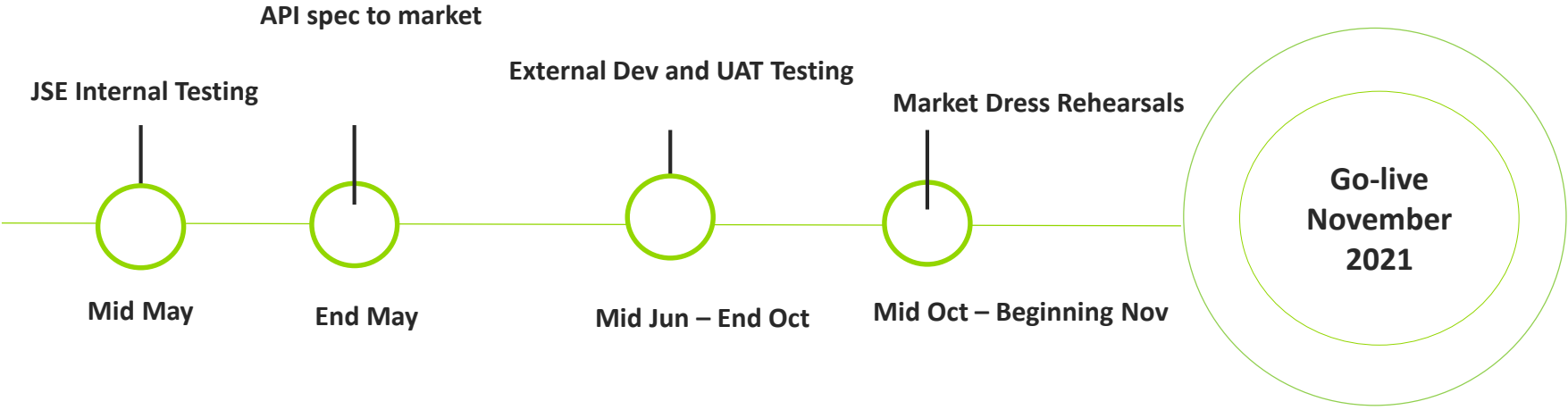
- Zintle Dastile

Diesel Contract Update

A new settlement type has been created for the Diesel contract – **Cash settled with an option to physically settle**

API Changes	Front End Changes
<ul style="list-style-type: none">• Database settlement type field• The instrument table• The instrument structure• Affected stored procedures	<ul style="list-style-type: none">• Downloading instruments from the API• No onscreen or off screen trading on expiry day• Must deliver functionality disabled for contract• Spot Basis premium trading only permitted from 1st Wednesday to last trading day of expiry month

Diesel Project Timeline



8. Custom Password Policies in Systems

- Ishen Prithipal

Custom password policies in systems

Systems impacted:

System	Identified person
SALS	Sipho, Mark Ashworth
SENS	John, Carike, Maryke
Capad	Melissa
Nutron	Martin / James
MIT	Martin / James
IDP/IPS/NOVA	Devon / NeilV / Nasheen / Eunice
RTC	Mahaan
BDA	Chris/Salome
Aurum	Sadhvi/Carike
CRM	Sylvester

Password management:

Users must manage their passwords in accordance with the following mandatory password requirements:

- Passwords are used to authenticate User accounts and must be kept secret:
 - Users must ensure that their passwords are not stored in an accessible or visible location;
 - Service and system passwords must be stored in the password vault;
- Default passwords must be changed on all new assets before being deployed;
- Clear-text passwords must not be sent via e-mail. An alternative channel, such as a cell phone must be used for instances where sending a clear-text password is the only available option. A password change on first login thereafter must be enforced if possible;
- Users may not share their password or any details about their user account with anyone, except in a specific situation for which this action is formally required by JSE ITD or a third party technician, where the User is required to divulge their password details to a third party technician for support purposes. In such instances, the User must directly supervise the technician and change affected passwords immediately afterwards;
- Passwords that are used for testing purposes, must not be the same for all participants and must adhere to the minimum password attributes provided below;
- Password history will be enabled and will be set to 24; The last 24 passwords used will be blocked from being used as the new password;
- Users must use strong password phrases rather than a single word passwords, with at least the following minimum attributes:
 - Make use of a password phrase with a minimum length of 14 (fourteen) characters, e.g. "I am running 1 time a day.", with the special character "." part of the phrase;
 - Normal user account passwords with a minimum length of 14 characters will expire every 60 days;
 - The password must contain a mixture of lower case letters (a-z), upper case letters (A-Z), numbers (0-9) and non-alphanumeric characters (e.g. !, @, #, \$, %, etc.);
 - Password complexity must be enabled on the Active Directory domain controller as well as any other solution managing Privileged Access Management (SailPoint). The password may not contain any alphabetic, numeric or keyboard sequences (i.e. '1234', 'qwerty', 'abcdefg', etc.);
 - Passwords may not be obvious word patterns, e.g. "Password1";
 - Privileged user accounts passwords are randomly generated and provided by the Password Vault solution, and expire every 24 hours. Access to obtain privilege account passwords from the Password Vault requires a two-factor PIN, which is only made available to authorised users; and
 - Privileged "System" account passwords (e.g. service accounts) must adhere to the minimum password attributes or be generated by the Password Vault solution and stored in the Password Vault when configured and implemented. These passwords are set to expire every 12 (twelve) months and must be 20 characters in length.

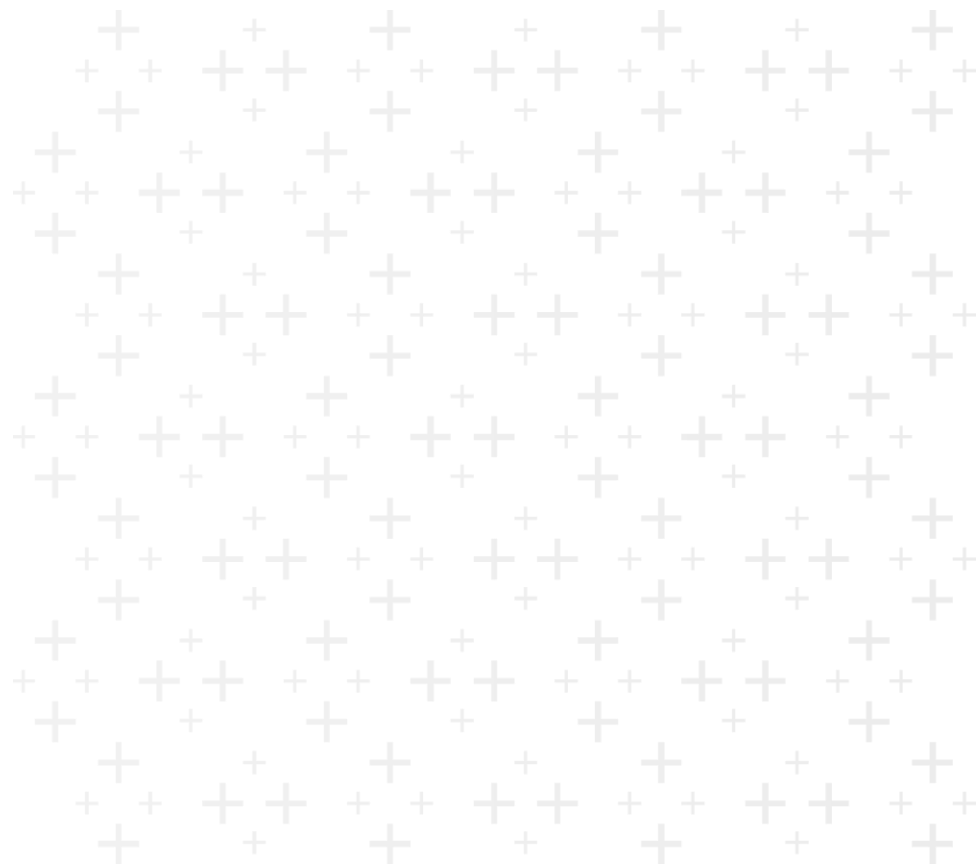
Account management:

User accounts must be managed in accordance with the following mandatory requirements:

- User accounts must be uniquely associated with a User and shared user accounts are not allowed. Additionally, Users must not use service accounts to login interactively to any systems;
- User accounts, including e-mail account credentials may not be used or shared for social or private login requirements;
- System/ service accounts must only be used by the operating/ application systems to run scheduled tasks and must not allow Users to login to them directly;
- Privileged accounts must be setup such that Users would first login to their account, obtain the admin password from the password vault application and then login to 'admin.x@jse.co.za' where x is the administrators' personal login IDs. In addition, MFA must be used before access can be granted;
- An inventory of all administrative accounts, including domain and local accounts, must be maintained;
- An inventory of all accounts organised by authentication system, must be maintained;
- Critical Systems must be configured to issue a log entry and alert when an account is added to or removed from any group assigned administrative privileges;
- Critical Systems must be configured to issue a log entry of unsuccessful logins to all accounts and to alert after 3 failed logon attempts;
- All account usernames and authentication credentials must be transmitted across the network using encrypted channels, or must be sufficiently masked so as to disable the direct use of any skimmed credentials;
- A process for revoking system access by disabling accounts immediately upon termination of an employee or contractor, must be maintained. These accounts must be disabled, instead of deleted to allow for the preservation of audit trails. In the event that an account needs to be enabled for business purposes, a dispensation must be completed to allow this account to remain active;
- Any account that cannot be associated with a business or support process or business owner, must be disabled;
- Any dormant accounts must be automatically disabled, after a 90 day period of inactivity;
- Temporary accounts must have a set expiration date that is monitored flagged for expiration, or expired;
- Workstation sessions must be set to automatically lock, after 10 minutes of inactivity;
- Attempts to access deactivated accounts in critical systems, must be monitored through audit logging and alerting; and
- Alerting must be implemented to report when Users deviate from normal login behaviour, such as time-of-day, workstation location, and duration

8. General

- Questions



End, Thank you...

