Welcome to the JSE Market Communication Broadcast

Session start: 12h30 SAST (GMT+2)

Teleconference number: +27 87 350 0288

Conference ID: 677002#

JSE moderator will dial in at 12h25 SAST


www.jse.co.za
Agenda

- Commodity Derivatives Market Update
- Integrated Trading and Clearing Project
- JSE Colocation Update
- JSE London Pop Upgrade
- 2014 Key Market Facing Dates
- T + 3 Update and Timelines
- Clearing and Settlement Billing Model
- Questions
Commodity Derivatives Market Update
Commodity Quanto’s on the Move

Quanto’s available
(all cash settled referencing international markets):

➤ **Metals**
  - Gold, Platinum, Palladium, Copper and Silver

➤ **Energy**
  - Brent Crude, Gasoline, Heating Oil and Natural Gas

➤ **Soft Commodities**
  - Sugar, Cotton, Cocoa, Coffee, Corn
Expanding the Options Available

- Can-do’s extended to the commodity market – initial contracts focused on maize and wheat
- Highly successful in the US - Short dated new crop options now available to white and yellow maize market participants to hedge out price risk during the volatile weather market
- Basis premiums – 12 months in operation and R10 million in premiums paid across to sellers
- Mini maize contracts available – 10 ton contract with an exposure of R24 000 compared to R240 000 main contract
Providing the local market with a range of new products:

- A diesel hedge for the local market including average pricing – standard contract size of 5000 litres
- A physically settled 500 metric tonne thermal coal contract with delivery points in Mpumalanga
- A basic commodity index tradable with the support of a market maker
- A range of additional cash settled products based on market demand – ethanol, rough rice and oats
- Futures contracts on basis premiums – trade premiums on many of the 200 registered grain delivery points

For more information email commodities@jse.co.za
Integrated Trading and Clearing Project
The JSE, as previously communicated, identified the need to replace the technology platform for the Equity Derivatives Market.

At the same time the JSE has set a strategy for 2017, key aspects of which are Integrated Trading & Clearing.

The JSE has concluded the analysis on the best way to proceed for the Equity Derivatives Market which has informed a broader JSE decision to embark on a strategic journey to transition all Derivative Markets and the Interest Rate Market across to a single new Trading System and a single new Clearing Solution. This extensive programme of work for all the markets will be phased over a number of years.

We firmly believe that this strategic journey is critical to the JSE enhancing the quality of our products and services to the South African and global financial community.
The JSE still needs to satisfactorily conclude final contract negotiations with the potential vendors early in the new year.

All the Derivative Markets and the Interest Rate Market will take at least a 3 year period commencing with the replacement of the Equity Derivatives Trading and Clearing platforms.

Planning of the various project phases will be done in such a way that the change can be digested by both the JSE and our clients.

The JSE also has to balance the start date of the programme with other competing priorities and projects that are already underway such as T+3 and Colocation, and we will engage with our clients in the new year on the potential timing of the programme.

The Equity Market transition to the single new Clearing Solution will be dealt with later in the Programme.
Final Colocation Services Schedules 1F and 2F are now available and have been issued to all customers who have signed the JSE Letter of Undertaking.

Customers wishing to make use of the Colocation Services must sign a JSA and the Colocation Services Schedules. If the customer has already signed a JSA then they only need to sign the Colocation Services Schedules.

Please send an email request for a copy of the new schedules to your Account Manager or Colocation@jse.co.za.
Colocation Services updates made recently

- **Power**
  - Due to Customer demand for additional power in HUs, the JSE investigated options to offer additional power to customers who require it
  - JSE will now offer either 3kW and/or 5kW HUs
  - In the original build out of 35 HUs there will be 18 x 3Kw HUs and 17 x 5kW HUs
  - Additional costs are required to accommodate the 5kW HUs (PDUs, cooling, etc.) as well as to standardise on the HU size resulting in a reduction of the total number of HUs being available

- **Time Sync Service with PTP**
  - Due to Customer demand for more accurate time syncing to microseconds
Colocation Services - Summary

Colocation Services Documentation
- Document is available on the JSE Colocation Page of the website

Customer Eligibility
- Members
- Member Clients
- Information Subscribers
- Shared Infrastructure Providers (SIPs)

Colocation available for all JSE markets

Fees and Billing
- Prorated billing is applicable where relevant
- Relevant agreements and authorisations must be in place prior to go live in production
Limited Capacity

- HUs will be provided on a first come first served basis
- HUs can only be secured once all signed agreements are in place
- Once the full capacity has been reached there will no further opportunity to make additional HUs available

JSE will ensure fairness and service equality to all Customers subscribing to the same services

Test services will only be facilitated through the Access Network – no access from Colocation can be facilitated
Customer Setup

- Customer setup or maintenance will involve 3 stages
  - Data centre rack and stack activities to ensure HU setup
  - Network connectivity tests to prove HU connectivity within the Colocation network
  - Enablement of application connectivity to services of the JSE which will include a live connectivity test to prove enablements and application connectivity to Gateways / Proxies

- Customer setup in Colocation follows a similar process to the current enablement process i.e. order form submission, Customer Enablement Information Form (CEIF) approval prior to Live Connectivity Test (LCON) etc.

- A detailed walkthrough will be provided to customers during a Technical Working Group (TWG) session, once the CSOF template is available
JSE London Point of Presence (PoP)
JSE London PoP Incident – 20 November 2013

- On Wednesday, 20 November 2013, the JSE London PoP was impacted by a fibre break in the London metropolitan area to the last mile connectivity to the PoP at Equinix in Slough
- The break affected both the London and Amsterdam circuits to the PoP which are currently provisioned through one telecommunications provider
- The outage was caused by a third party provider and resolution of the outage by the third party provider required access to a man-hole in London. The length of time to resolve the outage was mainly caused by a delay in receiving permission from relevant authorities to access the man-hole for the repairs to be done
- JSE daily system health checks did not detect the issue as a result of an issue with our monitoring solution and additional procedures are being implemented to our health checks
- Work is already in progress to upgrade the JSE London PoP
The JSE is enhancing the JSE London Point of Presence (PoP) services offered to clients and these enhancements will address the reliability as well as the functionality available to clients.

The JSE international links are being replaced through a new service provider and two different telecommunication providers will be used for the last mile connectivity from the UK landing site to the JSE London PoP in LD4.

The new JSE international links will be Layer 3 circuits and will therefore allow for dedicated international bandwidth to be procured by the JSE on behalf of its clients for trading and/or colocation management connectivity.

Ports will be provided to facilitate connectivity for both primary and secondary connections to the JSE Primary Data center, as well as the JSE Remote Disaster Recovery site.

Clients can decide what bandwidth they require for trading and/or colocation management connectivity and the cost of bandwidth will be quoted on request.
H1 2014 Key Market Facing Dates
## Critical production changes scheduled for Jan 2014

<table>
<thead>
<tr>
<th>#</th>
<th>Date</th>
<th>Description</th>
<th>Participation</th>
<th>Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>18 Jan 2014</td>
<td>Equity Market Production Resources Upgrade i.e memory, cpu etc.</td>
<td>All Markets - All Clients for connectivity tests</td>
<td>Colocation</td>
</tr>
<tr>
<td></td>
<td>Contingency: 25 Jan 2014</td>
<td>Trading Switch replacement (3K) Prod firewall &amp; NW routing changes (VDC/Firewall)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Implementation of Network monitoring taps</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Critical production changes scheduled for Feb/Mar 2014

<table>
<thead>
<tr>
<th>#</th>
<th>Date</th>
<th>Description</th>
<th>Participation</th>
<th>Participation Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>8 Feb 2014</td>
<td>Enable Colocation Network in production</td>
<td>All Markets</td>
<td>Selected Clients for connectivity tests</td>
</tr>
<tr>
<td></td>
<td>Contingency: 15 Feb 2014</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>10 Feb 2014 (TBC)</td>
<td>Equity Market CTS - New Gateways implemented</td>
<td>Equity Market</td>
<td>CTS functional testing for booked Clients</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>15 Feb 2014 Contingency:</td>
<td>Derivatives Trading Systems migration to the Trading Network</td>
<td>All Derivative Markets</td>
<td>All Derivatives Clients for connectivity tests</td>
</tr>
<tr>
<td></td>
<td>22 Feb 2014</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>22 Feb 2014 (TBC)</td>
<td>Equity Market Trading System Upgrade for New Gateways (software deployment only)</td>
<td>Equity Market</td>
<td>All Equity Market Clients for connectivity tests</td>
</tr>
<tr>
<td></td>
<td>Contingency: 1 Mar 2014</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Critical production changes scheduled for Mar/Apr/May 2014

<table>
<thead>
<tr>
<th>#</th>
<th>Date</th>
<th>Description</th>
<th>Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>1 Mar 2014&lt;br&gt;Contingency: 8 Mar 2014</td>
<td>New CISCO 4500s implementation and Firewall upgrade to Production Network</td>
<td><strong>All Markets</strong>&lt;br&gt;- Selected Clients for connectivity tests</td>
</tr>
<tr>
<td>7</td>
<td>15 Mar 2014&lt;br&gt;29 Mar 2014&lt;br&gt;5 Apr 2014&lt;br&gt;3 May 2014</td>
<td>Colocation Client Take-on</td>
<td><strong>All Markets</strong>&lt;br&gt;- Booked Colocation Clients for connectivity tests</td>
</tr>
<tr>
<td>8</td>
<td>21 Mar 2014&lt;br&gt;Contingency: 29 Mar 2014</td>
<td>JSE London PoP migration</td>
<td><strong>Equity Market</strong>&lt;br&gt;- All JSE London PoP Clients - connectivity tests</td>
</tr>
<tr>
<td>#</td>
<td>Date</td>
<td>Description</td>
<td>Participation</td>
</tr>
<tr>
<td>----</td>
<td>--------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>9</td>
<td>5 Apr 2014</td>
<td>Colocation Client Take-on for Remote Management via the JSE London PoP</td>
<td>All Markets</td>
</tr>
<tr>
<td></td>
<td>Contingency: 3 May 2014</td>
<td></td>
<td>- Booked Colocation Clients - connectivity tests</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Colocation</td>
</tr>
<tr>
<td>10</td>
<td>10 May 2014</td>
<td>Final Colocation Go Live cut-over activities</td>
<td>All Markets</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Colocation Customers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Colocation</td>
</tr>
<tr>
<td>11</td>
<td>12 May 2014</td>
<td>Colocation Go Live day</td>
<td>All Markets</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Colocation</td>
</tr>
</tbody>
</table>
## Equity Market Participant Test Weekends (PTWs)

<table>
<thead>
<tr>
<th>PTW Date</th>
<th>Cut-off Dates for Bookings (12h00 SAST)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sat, 25 January 2014</td>
<td>Friday, 10 January 2014</td>
</tr>
<tr>
<td>Sat, 15 February 2014</td>
<td>Friday, 31 January 2014</td>
</tr>
<tr>
<td>Sat, 15 March 2014</td>
<td>Friday, 28 February 2014</td>
</tr>
<tr>
<td>Sat, 12 April 2014</td>
<td>Friday, 28 March 2014</td>
</tr>
<tr>
<td>Sat, 10 May 2014</td>
<td>Friday, 25 April 2014</td>
</tr>
<tr>
<td>Sat, 14 June 2014</td>
<td>Friday, 30 May 2014</td>
</tr>
<tr>
<td>Sat, 12 July 2014</td>
<td>Friday, 27 June 2014</td>
</tr>
<tr>
<td>Sat, 16 August 2014</td>
<td>Friday, 1 August 2014</td>
</tr>
<tr>
<td>Sat, 13 September 2014</td>
<td>Friday, 29 August 2014</td>
</tr>
<tr>
<td>Sat, 11 October 2014</td>
<td>Friday, 26 September 2014</td>
</tr>
<tr>
<td>Sat, 8 November 2014</td>
<td>Friday, 24 October 2014</td>
</tr>
<tr>
<td>Sat, 6 December 2014</td>
<td>Friday, 21 November 2014</td>
</tr>
</tbody>
</table>
JSE Disaster Recovery Dates

• Disaster Recovery Test 1 - Internal JSE test – 24 and 25 May 2014
• Disaster Recovery Test 2 - Full Market test – 25 and 26 October 2014
T+3 Update and Timelines
Overall programme status
Market communication – May 2013
Summary of changes per phase and benefits of the changes
Approach taken to finalise timelines and costs
Critical success factors for Phase 2 go-live
Timeline changes following the completion of Detailed Design
Programme schedule overview
Key stakeholders at the JSE
User Readiness
Approval process
Next steps
## Overall Programme Status

<table>
<thead>
<tr>
<th>Phase</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Implemented successfully - 22 July 2013</strong></td>
</tr>
</tbody>
</table>
| 2     | • Development completed  
       | • Currently running System Integration Testing |
| 3     | • Analysis completed  
       | • Internal development commenced |
Phase 1 – Regulatory and Automation

Go live 22 July 2013

Go-live H2 2014

Phase 2 – ECS go-live on T+5 Settlement Cycle

Go-live as soon as possible after phase 2

Phase 3 – ECS and BDA T+3 Settlement Cycle
## Summary of Changes per Phase and the Benefits of the Changes

<table>
<thead>
<tr>
<th>Phase</th>
<th>Summary of changes per phase</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phase 2</strong></td>
<td>ECS (First Phase) • Deal Management • Prime Broking • Technology Roadmap Upgrade (ECS)</td>
<td><strong>Introduction of the new equities clearing system which allows for more automation for clearing and settlement in preparation for the move to T+3</strong>&lt;br&gt;<strong>Automation of Prime Broking transactions between executing broker and prime broker will enable prime broker to:</strong>&lt;br&gt;• easily identify prime broking transactions; and&lt;br&gt;• automation in managing settlement risk on prime account.&lt;br&gt;<strong>Will enable market participants to achieve settlement commitment on T</strong></td>
</tr>
<tr>
<td><strong>(ECS Go-live T+5)</strong></td>
<td></td>
<td><strong>Move to the T+3 settlement cycle</strong>&lt;br&gt;<strong>Automation of fails management reduces manual work and allows members to simply monitor the process</strong>&lt;br&gt;<strong>Automation of Account and Portfolio transactions will remove current manual processes followed by SAT and brokers</strong></td>
</tr>
<tr>
<td><strong>Phase 3</strong></td>
<td>ECS (Second Phase) • Change from T+5 to T+3 Settlement • Fails Management Automation • Portfolio Moves • Account Transfers</td>
<td></td>
</tr>
<tr>
<td><strong>(T+3 Implementation)</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Approach Taken to Finalise Timelines

<table>
<thead>
<tr>
<th>Internal</th>
<th>External</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functional specifications and business requirement specifications were finalised and signed-off</td>
<td>Engagement with the Market to confirm functionality</td>
</tr>
<tr>
<td>Detailed design sessions were held to finalise the requirements</td>
<td>Design sessions were held to finalise the requirements</td>
</tr>
<tr>
<td>An analysis period to finalise timelines based on functional specifications and detailed design sessions</td>
<td>The market gave formal sign-off of the requirements</td>
</tr>
<tr>
<td></td>
<td>An analysis period to finalise timelines based on functional specifications and detailed design sessions</td>
</tr>
</tbody>
</table>
Critical Success Factors for Phase 3 Go-Live

- If Corporate Actions (CA) can be limited over the go live period, the settlement risk and complexities will be reduced substantially (where this is not possible, record date and last trade date will be changed to align with the new settlement cycle)

- Educate members of the importance of script lending and borrowing as well as funding for a period of time, across settlement days for day traders

- Ensure resource availability across the market for 2 weeks after go-live to manage possible issues

- Select a go live date:
  - Over a long weekend if possible (providing more time for the migration checks)
  - That does not fall over a month-end or futures close out

- Significant education required for all participants including broader investor community (e.g. international register moves)
Timelines Following the Completion of Requirements and Design

Phase 1 – Regulatory and Automation
Implemented: 22 July 2013

Phase 2 – ECS go-live on T+5 Settlement Cycle
Planned Go-live: 7 July 2014

Phase 3 – ECS and BDA T+3 Settlement Cycle
Planned Go-live: April / May 2015
Programme Schedule Overview - Phase 2

2013

Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec
---|-----|-----|-----|-----|-----|-----|-----|-----

2014

Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec
---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----

Development
8 April – 30 September

AMT
1 Oct – 25 Oct

SIT
7 Nov – 7 March

Pre Prod setup
10 March – 1 April

UAT
02 April – 28 May

ORT
29 May – 12 Jun

Go Live Phase 2
7 July 2014
Programme Schedule Overview - Phase 3

2013
- Oct
- Nov
- Dec
- Jan
- Feb
- Mar
- Apr
- May
- Jun
- Jul
- Aug
- Sep
- Oct
- Nov
- Dec

2014
- Jan
- Feb
- Mar
- Apr
- May
- Jun
- Jul
- Aug
- Sep
- Oct
- Nov
- Dec

2015
- Jan
- Feb
- Mar
- Apr
- May
- Jun

Development Internal (including BDA Vendor)
23 October 2013 – 14 July 2014

Component testing
24 March – 5 Sept 2014

Phase 2
Go live
7 July + 2 Week Support

SIT
5 Sept 2014 – 12 December 2014

UAT and ORT
5 Jan 2015 – Apr 2015
(3 Cycles UAT)

CSDP’s Dev
Mid January 2014 – End March 2014

CSDP’s
Internal and Client testing
April 2014 – August 2014

CSDP’s Ready for JSE testing
September 2014 – February 2015

Go Live Ready - Phase 3
April / May 2015
Key Stakeholders at the JSE

Riaan Van Wamelen
IT Sponsor

Annabella Hofer
Head of EPO

Linda Dittrich
Programme Coordinator

Teresa Du Plessis
Programme Manager

Leila Fourie
Project Sponsor

John Burke
Issuer Regulation

Jannie Immelman
Information Services

Leanne Parsons
Equity Market

Leila Fourie
Post-Trade Services

Shaun Davies
Market Regulation

Brett Kotze
Project Owner

Business Owners

Tyrone Arendse
User Readiness
T+3

Andre Visser
Issuer Regulation

Shaun Davies
Market Regulation

Chris Grove
CSS and BDA

Brett Kotze
Clearing and Settlement

Maryke Swanepoel
Information services
A number of User Readiness activities have been defined for Phase 2:

- **Comms:**
  - Various communication events / activities have been scheduled to formalise the implementation dates for Phase 2 and 3.
  - Communications focussed on explaining the testing / training obligations on affected market participants will also be distributed during this period.

- **Stakeholder Management - Workshops** have been held with the market to discuss:
  - Migration activities from T+5 to T+3.
  - Reconfirmation of the Phase 3 designs.
  - Review of the Go live dependencies.
11 Nov 2013
JSE Exco approval

26 Nov 2013
JSE Board approval

28 Nov 2013
Market Communication
The equity member community has expressed discomfort with the old billing methodology for trading, clearing and BDA.

Members indicate a preference for a value-based methodology as this is more predictable, simpler and transparent.

A new value-based methodology was introduced for equity trading on 30 Sep 2013.

<table>
<thead>
<tr>
<th>Old trading methodology</th>
<th>New trading methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>% charge: 0.0055%</td>
<td>% charge: 0.0053%</td>
</tr>
<tr>
<td>Floor: R 4</td>
<td>Cap: R 300</td>
</tr>
<tr>
<td>Cap: R 20</td>
<td></td>
</tr>
</tbody>
</table>
In the current model, more than 80% of trades hit the floor.

Current Billing Methodology: % charge: 0.0027%, Floor: R 2.73 , Cap: R 11.08
## Effective Costs (Jan – Sep 2013)

<table>
<thead>
<tr>
<th>Trade Type</th>
<th>Pre-rebate Equity Trade Effective Cost</th>
<th>Pre-rebate C&amp;S Effective Cost</th>
<th>Post-rebate Equity Trade Effective Cost</th>
<th>Post-rebate C&amp;S Effective Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT</td>
<td>0.6248</td>
<td>0.4209</td>
<td>0.5733</td>
<td>0.3588</td>
</tr>
<tr>
<td>BK</td>
<td>0.0190</td>
<td>0.0113</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BT</td>
<td>0.0043</td>
<td>0.0023</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CF</td>
<td>0.0216</td>
<td>0.0079</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CT</td>
<td>0.0375</td>
<td>-0.0242</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GU</td>
<td>0.0896</td>
<td>0.0545</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC</td>
<td>0.0084</td>
<td>-0.0008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LT</td>
<td>0.0184</td>
<td>0.0108</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NC</td>
<td>0.0186</td>
<td>0.0059</td>
<td></td>
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<tr>
<td>NX</td>
<td>0.0676</td>
<td>0.0368</td>
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<tr>
<td>OD</td>
<td>0.0651</td>
<td>0.0378</td>
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<tr>
<td>OP</td>
<td>0.0249</td>
<td>0.0153</td>
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<tr>
<td>OX</td>
<td>0.0179</td>
<td>0.0114</td>
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<tr>
<td>PC</td>
<td>0.0002</td>
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<tr>
<td>PF</td>
<td>0.1044</td>
<td>0.0543</td>
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<td></td>
</tr>
<tr>
<td>TX</td>
<td>0.5500</td>
<td>0.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UT</td>
<td>0.1838</td>
<td>0.1139</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Market feedback indicates the following issues with regard to the clearing and settlement fee:

- **A per hit / trade methodology is not supported:**
  - Unpredictable
  - Non controllable
  - Complex
  - i.e. member’s unable to predict or manage costs or reconcile JSE invoices
## International C&S Billing Models

Precedent exists for a value based model

<table>
<thead>
<tr>
<th>Value Based</th>
<th>Trade Based</th>
<th>Volume Based</th>
<th>Per Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ASX Clear (Clearing)</td>
<td>• JSDC (Settlement)</td>
<td>• JSCC (Clearing)</td>
<td>• HKSCC (Clearing)</td>
</tr>
<tr>
<td>• CSCCC (Clearing and Settlement)</td>
<td>• EMCF (Clearing)</td>
<td></td>
<td>• HKSCC (Settlement – floor and cap)</td>
</tr>
<tr>
<td>• JSCC (Clearing)</td>
<td>• EuroCCP (Clearing)</td>
<td></td>
<td>• ASX Settle (Settlement)</td>
</tr>
<tr>
<td>• Eurex (Clearing)</td>
<td>• LCH. Clearnet Ltd (Clearing)</td>
<td></td>
<td>• Euroclear France (Settlement)</td>
</tr>
<tr>
<td>• Monte Titoli (Settlement)</td>
<td>• SIX x-clear (Clearing)</td>
<td></td>
<td>• Euroclear UK and Ireland (Settlement)</td>
</tr>
<tr>
<td>• BM&amp;F Bovespa (Clearing and Settlement)</td>
<td>• Eurex (Executed orders per month – Clearing)</td>
<td></td>
<td>• Clearstream AG (Settlement)</td>
</tr>
<tr>
<td></td>
<td>• CCG (Clearing)</td>
<td></td>
<td>• Monte Titoli (Settlement)</td>
</tr>
<tr>
<td></td>
<td>• C&amp;DS (Clearing and Settlement)</td>
<td></td>
<td>• DTC (Settlement)</td>
</tr>
<tr>
<td></td>
<td>• NSCC (Clearing)</td>
<td></td>
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</tr>
</tbody>
</table>
## Benchmark International C&S Models Summarised

<table>
<thead>
<tr>
<th>Exchange</th>
<th>Clearing House</th>
<th>Metric</th>
<th>Settlement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian Stock Exchange</td>
<td>ASX Clear</td>
<td>Value</td>
<td>Gross</td>
</tr>
<tr>
<td>Hong Kong Stock Exchange</td>
<td>HKSCC</td>
<td>Settlement Instruction (Value of SI)</td>
<td>Gross</td>
</tr>
<tr>
<td>Tokyo Stock Exchange</td>
<td>JSCC</td>
<td>Value/Contract number</td>
<td>Net</td>
</tr>
<tr>
<td>London Stock Exchange</td>
<td>LCH.Clearnet Ltd</td>
<td>Trade</td>
<td>Net</td>
</tr>
<tr>
<td>Deutsche Börse AG</td>
<td>Eurex</td>
<td>Value/Order</td>
<td>Net</td>
</tr>
<tr>
<td>Toronto Stock Exchange</td>
<td>CDS</td>
<td>Trade</td>
<td>Gross</td>
</tr>
<tr>
<td>NYSE</td>
<td>NSCC</td>
<td>Volume</td>
<td>Net</td>
</tr>
<tr>
<td>BM&amp;F Bovespa</td>
<td>BM&amp;F Bovespa</td>
<td>Value</td>
<td>Gross</td>
</tr>
</tbody>
</table>
A value based model will be congruent with the trading billing model and is supported by the member community.

<table>
<thead>
<tr>
<th></th>
<th>PROs</th>
<th>CONs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trades Based Charge</strong></td>
<td>• “Cost causing activity”, i.e. JSE clear each trade</td>
<td>• Unpredictable</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Not transparent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• In JSE environment 80% of trades hit the floor</td>
</tr>
<tr>
<td><strong>Value Based Charge</strong></td>
<td>• Predictable for members</td>
<td>• Perceived to introduce revenue risk for the JSE</td>
</tr>
<tr>
<td></td>
<td>• Transparent</td>
<td>• Negative effect on report only trades may be exacerbated with change of C&amp;S to value based as well</td>
</tr>
<tr>
<td></td>
<td>• Simple to apply</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• In-line with many International methodologies</td>
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</tbody>
</table>
Recommendation

Change the C&S billing methodology from the current trades to a value based model with a cap

Benefits of this approach:

- Simpler methodology
- Predictable for equity market members
- Aligns the equity trade fee to create an “all in trading cost” which is more predictable
- Any suggested parameters are based on the JSE remaining revenue neutral for this revenue stream
The following parameters will be used for modelling and market consultation:

- % charge: 0.0036%
- Cap: R150

Complete Trading Fee View:

<table>
<thead>
<tr>
<th>Cap</th>
<th>% Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity Trading</td>
<td>R 300</td>
</tr>
<tr>
<td>Clearing and Settlement</td>
<td>R 150</td>
</tr>
<tr>
<td>Total</td>
<td>R 450</td>
</tr>
</tbody>
</table>
High Level Member Impacts

- Time period considered: Nov 2012 – Oct 2013
- 36 members positively affected
- 20 members negatively affected (9 members by more than 10%)
Proposed Way Forward

- **OCT 13**: Internal discussion and consensus
- **NOV 13**: Exco approval of C&S Revenue Mandate, proposed methodology and approach
- **NOV 13**: Working Group and AC meetings information sharing session, Board, Comms
- **DEC 13**: JSE and member modelling
- **JAN 14**: JSE one-on-one consultations on impact analysis
- **FEB 14**: Formal member feedback collated and presented for Exco consideration
- **MAR 14**: Board approval of methodology change and notice to market participants in keeping with SLA 3 month notice period
- **JUL 14**: Go live
Questions?

Refer queries to:
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+27 11 520 7777