

SERVICE HOTLINE

REFERENCE NUMBER: 154/2019

24 July 2019

REMINDER: MANDATORY JSE MARKET FACING DISASTER RECOVERY TEST 17 AND 18 AUGUST 2019

Clients are advised that participation in the JSE Market Facing Disaster Recovery (DR) test on 17 and 18 August 2019 is mandatory. The earlier communicated DR test, scheduled for the 19 and 20 October 2019, has been cancelled due to Strate TCS BaNCS go-live.

Kindly find attached a checklist to be completed and returned to the JSE via email to: customersupport@jse.co.za by 22 August 2019 (clients to please complete sections that are applicable to them as not all sections might be applicable).

1. Preparation of end of day dissemination subscribers

End of day dissemination subscribers (BDA Dissemination and Information Subscribers) are advised to please download their production end of day files prior to 08h00 on Saturday, 17 August 2019; alternatively files can be downloaded after 14h00 on Sunday, 18 August 2019. The tables below stipulate the participation required and the scope of the test.

2. Test participation and high level test Schedule

| Market Participants Mandatory Testing |
|--|
| <ul style="list-style-type: none"> Equity Market - Trading connectivity logon Equity Derivatives Market - Trading connectivity logon* Commodity Derivatives Market - Trading connectivity logon* Interest Rate Derivatives Market - Trading connectivity logon* Currency Derivatives Market - Trading connectivity logon* Information Subscribers – Processing and re- requesting of missed multicast data <p><i>* Members of the Derivatives Market that do not have connectivity to the JSE remote Disaster Recovery site are required to make special arrangements with the JSE</i></p> |

| Market Participants Optional Testing |
|--|
| <ul style="list-style-type: none"> Equity Market - BDA Connectivity and enquiry functions Equity Market - ECS connectivity and view deals and settlement orders Clearing Members - connectivity and perform downloads and verify balances |

3. Confirmation of Testing

Kindly email the details of your key contact (name, surname, email address and cell phone number) to CustomerSupport@jse.co.za by no later than Friday, **2 August 2019 at 14h00**. This will ensure that you receive the necessary communication throughout the test.

Markets / Services:

- Equity Market
- Bond Derivatives Market
- Equity Derivatives Market
- Interest Rate Derivatives Market
- Currency Derivatives Market
- Commodity Derivatives Market
- Information Subscribers (both live and End Of Day)

Environment(s):

Production

Additional Information:

If you have any queries about this announcement, please contact the Client Services Centre on +27 11 520 7777 or e-mail Customersupport@jse.co.za

Issued By:

Nicola Comninos
Chief Risk Officer
Enterprise Risk Management

4. Test Environments

The technical connectivity is to be conducted from **Clients' environment** to **JSE Disaster Recovery (DR) Site**.

5. BDA

Please note that any BDA updates will not be rolled back so only **enquiry testing** is to be carried out.

6. Colocation

Please note that colocation environment is not available at the JSE DR site.

7. Participation

Reports of successful participation will be issued to Compliance Officers of each client.

NB: Please ensure that you **verify your setup with your Network Service Provider (NSP) or Shared Infrastructure Provider (SIP) prior** to the Disaster Recovery (DR) test and arrange for the necessary support and have network engineers available for assistance.

| # | Test timeline | Client testing requirement |
|----|---|--|
| 1. | Saturday 17 August 2019 Prior to 08h00 | <ul style="list-style-type: none"> • Clients to download Friday's End of Day files. |
| 2. | Saturday 17 August 2019 11h00 – 12h30 | <ul style="list-style-type: none"> • JSE Network fail over to the JSE Disaster Recovery (DR) Site i.e. shutdown of JSE Production Network; and • Where required, clients to manually fail over their own Production Network links to the JSE Disaster Recovery (DR) site. |
| 3. | Saturday 17 August 2019 13h00 – 14h00 | System Online <ul style="list-style-type: none"> • Clients to conduct connectivity tests to the JSE Disaster Recovery (DR) site; • Login to the Equity, Equity Derivatives, Commodity Derivatives, Interest Rate Derivatives and Currency Derivatives Markets; and • Clients to notify Customer Support once they are on-site and again, when all testing has been completed. |
| 4. | Saturday 17 August 2019 14h00 - 17h00 | Equity Market Trading and Information Service: <ul style="list-style-type: none"> • Production source IP addresses for the Primary Feed only will be used to connect to the JSE Disaster Recovery (DR) site. The Secondary Feed is not available via the JSE Disaster Recovery (DR) site; • Clients to connect and login to the Equity Market Trading Gateways and Market Data Recovery Gateways; • Instruments will move into the default trading session (Continuous Trading) that is applicable on a Normal Trading Day at the time of the test; • The order book will be empty at the start of the test, as per DR procedure; • Notification of order cancellations generated as a result of the Disaster Recovery (DR) test Failover is NOT published to the market; • Perform an Own Order Book Download (OOBD) to get the latest status of their orders; • Perform and Own Trade Book Download (OTBD) to get the latest status of their trades; • Confirm the flow of multicast data for all Market Data services that clients subscribe to; and • Recover multicast messages published in the morning. Derivative Markets Trading and Deal Management: <ul style="list-style-type: none"> • Equity Derivatives, Commodity Derivatives, Interest Rate Derivatives and Currency Derivatives markets will be available for testing; • The trading system will be in a Market Online/ Download Only state at the start of the test; • The ALSI and ALMI contracts will be placed in a 5 minute Auction Call session from 14h00 - 14h05 (any changes to the schedule will be communicated to clients); • All other contracts will transition directly into the Continuous Trading session; • Perform an Own Order Book Download (OOBD) to get the latest status of their orders; • Perform and Own Trade Book Download (OTBD) to get the latest status of their trades; • Information subscribers may also connect and subscribe to data; • Confirm the flow of multicast data for all Market Data services that clients subscribe to; |

- Recover multicast messages published in the morning; and
- Clients are advised to perform deal management functions during the test.

Optional Test Requirements for Trading Members and Information Subscribers:

| Optional DR Test Activity | Trading Member | | | | | Information Subscriber |
|--|----------------|-----|-----|-----|-----|-------------------------|
| | EQM | EDM | FXM | IRD | CDM | EQM, EDM, IRD, CDM, FXM |
| Submit minimum ONE order per member | X | X | X | X | X | |
| Submit minimum ONE reported trade per member | X | X | X | X | | |
| Perform Deal Management functions e.g. Allocation, Assigns e.t.c | X | X | X | X | X | |
| OBD and OTBD | X | | | | | |
| Re-request login of MDGs | X | | | | | X |
| Verify receipt of SENS Announcement | X | | | | | X |
| Confirm download of Friday night's EOD files. | | | | | | X |

Expectation for Clearing Members:

- Clearing members connect to the JSE Disaster Recovery (DR) site and prove connectivity; and
- Download the balancing from the previous EOD.

Clients to login to the following applications:

- **Information Delivery Portal (IDP)**

Clients to connect and login to the IDP Service and download their files as at Friday, 16 August 2019.

- **Internet**

Clients to connect to the JSE Market Communication page <https://www.jse.co.za/services/technologies/market-communications> to test connectivity and check the overall test progress.

| | | |
|----|---|---|
| 5. | <p>Saturday 17 August 2019 17h30 -</p> <p>Sunday 18 August 2019 10h00</p> | <ul style="list-style-type: none"> • JSE to fail the JSE Network and services back to the JSE Production site; • No participation required from clients during this period; and • Where required, clients to manually fail over their own Production Network links back to the JSE Production site and cleanup all test data published during the test. |
| 6. | <p>Sunday 18 August 2019 10h00 - 12h00</p> | <p>Clients to notify Customer Support once they are on site and once all testing is completed.</p> <ul style="list-style-type: none"> • Clients to prove connectivity back to the JSE Production services for Equity Trading and Information, Nutron (markets will be in download state) and IDP and JSE website; • Clearing Members are required to: <ul style="list-style-type: none"> - Connect to the JSE Production site and prove connectivity; |

- Download the balancing from EOD on Friday, 16 August 2019.

- Connectivity to JSE Colocation services;
- Login to IDP to download a file that clients subscribe to; and
- Clean up all test data published during the test to ensure business readiness for Monday, if not already conducted on Saturday.

NOTE: Should clients encounter any issues please contact
CustomerSupport@jse.co.za or +27 11 520 7777