Integrated Trading and Clearing (ITaC) Non-Live Market Data Subscriber User Acceptance Test Plan For the Equity Derivative and Currency Derivative Markets

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## **Document history**

The revision history contains details of all changes made to this document. Each new version of the document will contain all history of all previous versions.

Version	Date	Comment
1.0	21 February 2018	Document Creation

### **Reference Documents**

This section lists the relevant documents which are referenced in order to produce this document. It is recommended that this document is not read without first familiarising yourself with the below mentioned documents/ artefacts:

Document Name	Location
Equity Derivatives Non Live Data Products Specifications	Equity Derivatives Non-Live Data Products Specifications.pdf
Currency Derivatives Non Live Data Products Specifications	Currency Derivatives Non-Live Data Products Specifications.pdf
Non Live Market Data Product Change Impact Analysis	Non-Live Market Data Products Change Impact Analysis.xlsx
IDP Connectivity Document for ITaC NLMD UAT	IDP Connectivity Document for ITaC NLMD UAT.pdf

### 1. PURPOSE

The primary objective of the Non-Live Market Data User Acceptance Test (hereafter referred to as UAT), planned for the period from **12 March to 20 April 2018**, is to prove the technical deployment activities and functional tests of a data subscriber's solution.

The UAT exercise will mitigate the risk to data subscribers and the JSE of data subscribers experiencing issues on the first business day of go-live of the ITAC project.

This document provides data subscribers that will participate in UAT, with the necessary contextual information about the UAT to assist their testing efforts.

### 2. INTRODUCTION

The UAT exercise will provide data subscribers with a near production simulation that will allow data subscribers to test their access to the JSE Information Delivery Portal (IDP) and test the receipt and processing of the data records and the subsequent processing of the data into downstream systems.

The principles underpinning UAT are as follows:

- 1. The UAT exercise will, as much as possible, simulate a traditional business day so the data files will be made as close as possible to the planned production delivery times.
- 2. The UAT will make use of the **production IDP service** to facilitate the use of **existing IDP access credentials**. New IDP users will be provided with new access credentials.
- 3. A **distinct test folder structure** will be used so as not to interfere or cause confusion with the production folder structure.
- 4. The data records will, in the theme of a near-production experience, be provided via data subscriber **specific data files**.
- 5. Data subscribers will be offered access to all the data records for both markets during UAT. However, this is optional, and each data subscriber can decide which data records to subscribe to during the testing.
- 6. The JSE will not dictate to data subscribers as to when to test each data record during the UAT period therefore no scripted testing will take place.
- 7. Data Subscribers will decide after the UAT which data records will be required for production access on go-live as part of the agreement and fee negotiations.
- 8. The source of the data for the data records is the same environment as that being used for the Mandatory Clearing Member Testing (MCMT).
- 9. **Data Subscribers will be expected to complete a UAT Checklist** and provide the completed checklist to the JSE at the end of the UAT exercise. The Checklist will require data subscribers to certify the following:
  - Successful access to the IDP service
  - Ability to access and retrieve data subscriber specific data folder/files
  - Ability to access and process the data records in the data subscriber specific data folder/files

Note: While the JSE welcomes checks on the accuracy of the test data, data subscribers will not be expected to certify the accuracy of the test data values i.e. computed statistics.

## 3. **SCOPE**

#### 3.1. In Scope

There are **36 data records** in scope, spread across the two markets (EDM and FXM), with **12 different types of data files**. The data subscriber specific data files per data subscriber will differ based on the data record subscription.

The data records will be made available at the designated frequency and time as listed in the below tables in 3.2 and 3.3.

#### 3.2. Currency Derivative (FXM) Data Records

Comprised of 17 data records in total across 6 different data files. All times are stipulated in South African Standard Time (SAST – GMT+2)

Data Record Name	Dissemination Frequency	Dissemination Time	Data Record Identifier	Data File Name
Daily Traded Statistics	Daily	20:00	DCD – Subtype 1	CD.ZIP
Daily Full Market Type Statistics	Daily	20:00	SCD – Subtype 2	CD.ZIP
Daily Full Market Overall Totals	Daily	20:00	OCD – Subtype 2	CD.ZIP
Early MTM	Daily	16:00	MCD – Subtype 3	CD15.ZIP
Mark to Market All	Daily	20:00	MCD – Subtype 1	CD.ZIP
Market Statistics (Daily)	Daily	20:00	MCD – Subtype 2	CD.ZIP
Mark to Market All	Daily	20:00	MCD – Subtype 1	CD.ZIP
Market Statistics (Weekly)	Weekly	20:00	MCD – Subtype 4	CD.ZIP
Market Statistics (Monthly)	Monthly	20:00	MCD – Subtype 5	CD.ZIP
South African Rates	Daily	10:10	RCD – Subtype 1	CD10.ZIP
South African Rates	Daily	11:15	RCD – Subtype 2	CD11.ZIP
South African Rates	Daily	20:00	RCD – Subtype 3	CD.ZIP
Risk Parameters	Daily	20:00	ACD – Subtype 1	CD.ZIP
Close Out Prices	Quarterly	17:25	CCD – Subtype 1	CD12.ZIP
Rand Spot	Daily	11:10	CCD – Subtype 2	CD10.ZIP
Rand Spot	Daily	16:10	CCD – Subtype 3	CD16.ZIP
Margin Requirements	Fortnightly	20:00	ICD – Subtype 1	CD.ZIP
Detailed Instruments	Daily	20:00	XCD – Subtype 1	CD.ZIP

#### 3.3. Equity Derivative (EDM) Data Records

Comprised of 19 data records in total across 6 different data files. All times are stipulated in South African Standard Time (SAST – GMT+2)

Data Record Name	Dissemination Frequency	Dissemination Time	Data Record Identifier	Data File Name
Daily Traded Statistics	Daily	20:00	DED – Subtype 1	ED.ZIP
Market Statistics (Daily)	Daily	20:00	DED – Subtype 2	ED.ZIP
Market Statistics (Weekly)	Weekly	20:00	DED – Subtype 3	ED.ZIP
Market Statistics (Monthly)	Monthly	20:00	DED – Subtype 4	ED.ZIP
Daily Full Market Type Totals	Daily	20:00	SED – Subtype 2	ED.ZIP
Daily Full Market Overall Totals	Daily	20:00	OED – Subtype 2	ED.ZIP
Early Mark to Market	Daily	16:00	MED – Subtype 1	ED15.ZIP
Mark to Market All	Daily	20:00	MED – Subtype 2	ED.ZIP
South African Rates	Daily	10:15	RED – Subtype 1	ED10.ZIP
South African Rates	Daily	11:15	RED – Subtype 2	ED11.ZIP
South African Rates	Daily	20:00	RED – Subtype 3	ED.ZIP
Close Out Prices	Quarterly	12:45	CED – Subtype 1	ED12.ZIP
Margin Requirements	Fortnightly	20:00	IED – Subtype 1	ED.ZIP
<b>Options Daily Traded Report</b>	Daily	20:00	PED – Subtype 1	ED.ZIP
Dividends	Daily	20:00	IED – Subtype 2	ED17.ZIP
Volatility Surface	Daily	17:15	LED – Subtype 2	ED17.ZIP
All Contract Details	Daily	20:00	AED – Subtype 1	ED.ZIP
Risk Parameters	Daily	20:00	ADD – Subtype 1	ED.ZIP
Detailed Instruments	Daily	20:00	XED – Subtype 1	ED.ZIP

### 4. USER ACCEPTANCE TEST ENVIRONMENT

The production IDP service will be used. While there a risk to using a current production system, there is value to the data subscribers to conduct testing on production IDP which will mean fewer changes when moving over into production mode. The JSE will mitigate the risk by using test folders and test data files names for the duration of UAT.

#### 4.1. IDP Folder Structure

The folder structure will mirror the production folder structure, with the only exception being the naming convention of the folder. The **top level folder** will have "**Test Members**", so as to distinguish it from the production folder structure.

As example, the path to a data subscriber folder will be "Test Membersxxx'' - xxx being the alpha code of the Data Subscriber

As a set of test folders will be used for UAT, the test folders will be renamed prior to go-live to ensure that data subscribers are not accessing the test folder on go-live.

#### 4.2. Access to the IDP Service

As stated previously, the production IDP service will be used for UAT so any IDP access credentials created will persist to production. Access to the IDP service and the folder and name structure is explained in supporting document "IDP Connectivity Document for ITaC NLMD UAT".

### 5. USER ACCEPTANCE TEST APPROACH

#### 5.1. Test Success Criteria

- Successful access and connectivity to the IDP service
- Successful access to the UAT folder structure and specifically the data subscriber specific folder
- Successful access to the data subscriber specific data file(s) at the specified times
- Successfully download and process the data records from the data files

Note: While it is important for the processing of the data into downstream systems, this is not a key success criteria of the JSE UAT however is a key success criteria for data subscribers

#### 5.2. Test Execution

Test execution will focus on executing against the defined scope, and will differ for each data subscriber.

Defect fixing will take place on an ongoing basis and changes to data records as a result of defect resolutions will be communicated to the data subscribers on a daily basis to facilitate retesting where relevant.

### 6. TEST DATA MANAGEMENT

Test data management is the process of creating realistic test data for non-production purposes such as development, testing, etc. Test data for testing is sourced from multiple sources and different methodologies are employed to source the data depending on the source system, test environment and the nature of data involved.

The test data used for NLMD UAT will align as much as possible to the production data but will not match up totally due to the need to cater for specific business scenarios and events in the common test bed.

#### 6.1. Test Data Creation

All daily data records will be created on each business day however those data records that are event triggered will only be created when the specific event(s) occur. E.g. Weekly records will be created on the last business day of the week. These various event triggered will be identified and communicated on an ongoing basis as required.

No	Date	Daily Records	Weekly Records	Monthly Records	Margin Requirements	Closeout Prices
1	Mon, 12 Mar	Y				
2	Tue, 13 Mar	Y				
3	Wed, 14 Mar	Y				
4	Thu, 15 Mar	Y				EDM Y (FCO)

#### 2018 UAT Calendar of events

No	Date	Daily Records	Weekly Records	Monthly Records	Margin Requirements	Closeout Prices
5	Fri, 16 Mar	Y	Y			
6	Sat, 17 Mar	Weekend				
7	Sun, 18 Mar	Weekend				
8	Mon, 19 Mar	Y				FXM Y (FCO)
9	Tue, 20 Mar	Y				
10	Wed, 21 Mar	Public Holiday –	Non business day	ı in SA	•	
11	Thu, 22 Mar	Y				
12	Fri, 23 Mar	Y	Y		Y	
13	Sat, 24 Mar	Weekend			•	
14	Sun, 25 Mar	Weekend				
15	Mon, 26 Mar	Y				
16	Tue, 27 Mar	Y	Y	Y		
17	Wed, 28 Mar	UAT Test Data R	efresh – UAT env	ironment will no	ot be available	
18	Thu, 29 Mar	UAT Test Data R	efresh – UAT env	ironment will no	ot be available	
19	Fri, 30 Mar	Public Holiday -	- Non business da	y in SA		
20	Sat, 31 Mar	Weekend				
21	Sun,1 Apr	Weekend				
22	Mon, 2 Apr	Public Holiday -	- Non business da	y in SA		
23	Tue, 3 Apr	Y				
24	Wed, 4 Apr	Y				
25	Thu, 5 Apr	Y				
26	Fri, 6 Apr	Y	Y		Y	
27	Sat, 7 Apr				•	
28	Sun, 8 Apr					
29	Mon, 9 Apr	Y				
30	Tue, 10 Apr	Y				
31	Wed, 11 Apr	Y				
32	Thu, 12 Apr	Y				
33	Fri, 13 Apr	Y	Y			
34	Sat, 14 Apr	Weekend				
35	Sun, 15 Apr	Weekend				
36	Mon, 16 Apr	Y				

No	Date	Daily Records	Weekly Records	Monthly Records	Margin Requirements	Closeout Prices
37	Tue, 17 Apr	Y				
38	Wed, 18 Apr	Y				
39	Thu, 19 Apr	Y				EDM Y (FCO)
40	Fri, 20 Apr	Y	Y		Y	

### 7. INCIDENT MANAGEMENT

#### 7.1. DEFECT AND QUERY LOGGING PROCESS

- 1. All Defects/queries must be logged as soon as they occur.
- Defects/queries must be logged via email with the JSE Client Service Centre (CSC) via <u>CustomerSupport@jse.co.za</u> – this is to ensure automated ticket logging of the defect/query. In the event that you do not receive an automated ticket response, kindly contact CSC on +27 11 520-7777.
- 3. Information required **when logging a defect/query**, provide the following information:
  - Company Name/ID
  - $\circ$   $\hfill Data record type and name e.g. DED-01$
  - Description of the defect/query
  - o Contact Details
  - o JSE logged ticket reference will be received via email
- 4. All defects/queries will be managed following the standard JSE support process.
- 5. In the event that you are not satisfied with the turnaround time or the resolution feedback from the JSE, kindly escalate to <u>MDProjects@jse.co.za</u>.

Note: Data subscribers are responsible for ensuring that they receive a ticket number for all defects/queries logged with the JSE.

## 8. PROGRESS REPORTING

In an effort to provide full transparency during the testing, a weekly progress report, that will reflect a composite view of defects and status of resolutions, will be compiled by the JSE and circulated to all participating UAT data subscribers.

This level of reporting will allow you to gain insight of the UAT progress and evaluate if any immediate actions need to taken.