

Integrated Trading and Clearing (ITaC)  
Non-Live Information Subscriber  
End To End 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	15 June 2018	Document Creation
1.1	03 July 2018	Provided clarity on filename to expect for existing Data Subscribers current accessing IDP in production mode.
1.2	5 July 2018	Provided further clarity on folder and file name in section 4.1
1.3	13 July 2018	Added ETE cycle number to ETE Schedule
<u>1.4</u>	<u>27 July 2018</u>	<u>Added additional Futures Close Out (FCO) business events</u>

## 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	<a href="https://www.jse.co.za/services/itac#NLMDProductsSpecifications">https://www.jse.co.za/services/itac#NLMDProductsSpecifications</a>
Currency Derivatives Non Live Data Products Specifications	<a href="https://www.jse.co.za/services/itac#NLMDProductsSpecifications">https://www.jse.co.za/services/itac#NLMDProductsSpecifications</a>
Non Live Market Data Product Change Impact Analysis	<a href="https://www.jse.co.za/services/itac#NLMDProductsSpecifications">https://www.jse.co.za/services/itac#NLMDProductsSpecifications</a>
IDP Connectivity Document for ITaC ETE Test	<a href="https://www.jse.co.za/services/itac#EndToEndTestingDocumentation">https://www.jse.co.za/services/itac#EndToEndTestingDocumentation</a>

## 1. PURPOSE

The primary objective of the Non-Live Information Subscriber End to End (ETE hereafter referred to as UAT) test, planned for the period from **26 June to 4 September 2018**, is to help prove the technical deployment activities and functional tests of a Non-Live data subscriber's solution.

The ETE 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 Information subscribers with a near production simulation to facilitate testing the access to the JSE Information Delivery Portal (IDP) as well as testing the receipt and processing of the provided data records and the subsequent processing of the data into downstream systems.

The principles underpinning ETE are as follows:

1. **The ETE 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 ETE 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 different ETE test folder structure will be used so as not to interfere or cause confusion with the previous UAT exercise as well as the production folders.**
4. **The data records will, in the theme of a near-production experience, be provided via Information Subscriber specific data files.**
5. **Information Subscribers must firm up their data record subscriptions as the ETE subscription definitions will be used to configure the production subscriptions.**
6. **The JSE will not dictate to data subscribers as to when to test each data record during the ETE period i.e. No scripted testing will take place.**
7. **The source of the data for the data records is the same environment (Test bed 75) as that being used for the Mandatory Clearing Member Testing (MCMT) and other testing.**

*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
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	CD17.ZIP
Rand Spot	Daily	11:10	CCD – Subtype 2	CD11.ZIP
Rand Spot	Daily	16:10	CCD – Subtype 3	CD17.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
Options Daily Traded Report	Daily	20:00	PED – Subtype 1	ED.ZIP
Dividends	Daily	20:00	IED – Subtype 2	ED.ZIP
Volatility Surface	Daily	17:15	LED – Subtype 1	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. END TO END TEST ENVIRONMENT

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

### 4.1. IDP Data File Name and Folder Structure

The folder path structure will be as per the below so as to distinguish it from the production folder.

`\Members Test\Member <alphacode>\IDP\`

Where *<alphacode>* is the designated alpha code of the Information Subscriber

Note: The test folder will be renamed prior to go-live to ensure that Information Subscribers are not accessing the test folder by mistake on go-live.

The test file name standard for the high level Zip file for new Data Subscribers accessing IDP is as follows:

`DDAP.SPRD.<alphacode>.<ProductCode>.ZIP`

Where *<ProductCode>* is either CD, CD10, CD11, CD15, CD17, ED, ED10, ED11, ED12, ED15, ED17

Due to a technical problem in the distribution of the test data files for existing Data Subscribers that currently access data files in production mode via IDP, the ZIP test filename standard will be different as follows. The JSE is working on a solution to this issue but the below standard applies until advised.

`DDAP.SPRD.XXX_TEST.<ProductCode>.ZIP`

Where *<ProductCode>* is either CD, CD10, CD11, CD15, CD17, ED, ED10, ED11, ED12, ED15, ED17

After unzipping the high level zip data file, the lower level text data file name standard is as follows:

`<ProductCode>_ETE`

Where *<ProductCode>* is either CD, CD10, CD11, CD15, CD17, ED, ED10, ED11, ED12, ED15, ED17

### 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 ETE".

## 5. END TO END TEST APPROACH

### 5.1. Test Success Criteria

1. **Successful access and connectivity to the IDP service**
2. **Successful access to the UAT folder structure and specifically the data subscriber specific folder**
3. **Successful access to the data subscriber specific data file(s) at the specified times**
4. **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 ETE, however is a key success criteria for Information 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 ETE 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.



ETE Schedule and calendar of events

Cal Days	Testing Days	ETE Cycle No	Date	Daily Records	Weekly Records	Monthly Records	Margin Requirements	Closeout Prices	
1	1	1	Tue, 26 Jun	Y					
2	2	1	Wed, 27 Jun	Y					
3	3	1	Thu, 28 Jun	Y					
4	4	1	Fri, 29 Jun	Y	Y	Y			
5		1	Sat, 30 Jun	Weekend					
6		1	Sun, 1 Jul	Weekend					
7	5	1	Mon, 2 Jul	Y					
8	6	1	Tue, 3 Jul	Y					
9	7	1	Wed, 4 Jul	Y					
10	8	1	Thu, 5 Jul	Y					
11	9		Fri, 6 Jul	Y	Y		Y		
12			Sat, 7 Jul	Weekend					
13			Sun, 8 Jul	Weekend					
14			Mon, 9 Jul	ETE Test Data Refresh – Test Data records will not be produced					
15			Tue, 10 Jul	ETE Test Data Refresh – Test Data records will not be produced					
16			Wed, 11 Jul	ETE Test Data Refresh – Test Data records will not be produced					
17			Thu, 12 Jul	ETE Test Data Refresh – Test Data records will not be produced					
18			Fri, 13 Jul	ETE Test Data Refresh – Test Data records will not be produced					
19			Sat, 14 Jul	Weekend					
20			Sun, 15 Jul	Weekend					
21	10	2	Mon, 16 Jul	Y					
22	11	2	Tue, 17 Jul	Y					
23	12	2	Wed, 18 Jul	Y					
24	13	2	Thu, 19 Jul	Y				Y – EDM FCO	
25	14	2	Fri, 20 Jul	Y	Y				
26		2	Sat, 21 Jul	Weekend					
27		2	Sun, 22 Jul	Weekend					
28	15	2	Mon, 23 Jul	Y				Y - FXM Expiry	
29	16	2	Tue, 24 Jul	Y					
30	17	2	Wed, 25 Jul	Y					

Cal Days	Testing Days	ETE Cycle No	Date	Daily Records	Weekly Records	Monthly Records	Margin Requirements	Closeout Prices	
31	18	2	Thu, 26 Jul	Y					
32	19		Fri, 27 Jul	Y	Y		Y		
33			Sat, 28 Jul	Weekend					
34			Sun, 29 Jul	Weekend					
35	20	3	Mon, 30 Jul	Y		Y			
36	21	3	Tue, 31 Jul	Y					
37	22	3	Wed, 1 Aug	Y				<a href="#">Y – FXM Expiry</a>	
38	23	3	Thu, 2 Aug	Y				<a href="#">Y – EDM FCO</a>	
39	24	3	Fri, 3 Aug	Y	Y				
40		3	Sat, 4 Aug	Weekend					
41		3	Sun, 5 Aug	Weekend					
42	25	3	Mon, 6 Aug	Y					
43	26	3	Tue, 7 Aug	Y				<a href="#">Y – EDM FCO</a>	
44	27	3	Wed, 8 Aug	Y				<a href="#">Y – FXM Expiry</a>	
45		3	Thu, 9 Aug	Public Holiday					
46	28	3	Fri, 10 Aug	Y	Y		Y		
47			Sat, 11 Aug	Weekend					
48			Sun, 12 Aug	Weekend					
49			Mon, 13 Aug	ETE Test Data Refresh – Test Data records will not be produced					
50			Tues, 14 Aug	ETE Test Data Refresh – Test Data records will not be produced					
51			Wed, 15 Aug	ETE Test Data Refresh – Test Data records will not be produced					
52			Thu, 16 Aug	ETE Test Data Refresh – Test Data records will not be produced					
53			Fri, 17 Aug	ETE Test Data Refresh – Test Data records will not be produced					
54			Sat, 18 Aug	Weekend					
55			Sun, 19 Aug	Weekend					
56	29	4	Mon, 20 Aug	Y					
57	30	4	Tue, 21 Aug	Y					
58	31	4	Wed, 22 Aug	Y				<a href="#">Y – EDM FCO</a>	
59	32	4	Thu, 23 Aug	Y				Y – FXM <a href="#">FCO Expiry</a>	
60	33	4	Fri, 24 Aug	Y	Y		Y		
61		4	Sat, 25 Aug	Weekend					

Cal Days	Testing Days	ETE Cycle No	Date	Daily Records	Weekly Records	Monthly Records	Margin Requirements	Closeout Prices	
62		4	Sun, 26 Aug	Weekend					
63	34	4	Mon, 27 Aug	Y				Y – EDM FCO	
64	35	4	Tue, 28 Aug	Y					
65	36	4	Wed, 29 Aug	Y					
66	37	4	Thu, 30 Aug	Y				<u>Y – FXM Expiry</u>	
67	38	4	Fri, 31 Aug	Y	Y	Y			
68		4	Sat, 1 Sep	Weekend					
69		4	Sun, 2 Sep	Weekend					
70	39	4	Mon, 3 Sep	Y					
71	40	4	Tue, 4 Sep	Y					

## 7. INCIDENT MANAGEMENT

### 7.1. DEFECT AND QUERY LOGGING PROCESS

1. All Defects/queries must be logged as soon as they occur.
2. Defects/queries must be logged via email with the JSE Client Service Centre (CSC) via [CustomerSupport@jse.co.za](mailto:CustomerSupport@jse.co.za) – 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
  - Data record type and name e.g. DED-01
  - Description of the defect/query
  - Contact Details
  - 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 [MDProjects@jse.co.za](mailto:MDProjects@jse.co.za).

*Note: Information 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 ETE Information Subscribers.

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