

# Interest Rate Market Data Products User Manual

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## TABLE OF CONTENTS

<b>1</b>	<b>VERSION CONTROL .....</b>	<b>4</b>
<b>2</b>	<b>DISCLAIMER .....</b>	<b>5</b>
<b>3</b>	<b>INTRODUCTION.....</b>	<b>5</b>
<b>4</b>	<b>FTP SITE ACCESS AND FILE LOCATIONS.....</b>	<b>6</b>
4.1	FTP SITE AND FOLDERS.....	6
4.2	ACCESS TO IDP SERVER.....	6
<b>5</b>	<b>RETRIEVING DATA PRODUCT FILES.....</b>	<b>6</b>
	<b>ZERO CURVES.....</b>	<b>7</b>
5.1	ZERO CURVE .....	7
5.1.1	Report Detail .....	7
5.1.2	Report Field Descriptions .....	7
5.1.3	Record Layout .....	9
5.2	LINEAR SWAP CURVE.....	10
5.2.1	Report Detail .....	10
5.2.2	Report Field Descriptions .....	10
5.2.3	Record Layout .....	11
	<b>MARK TO MARKET (MTM) REPORTS .....</b>	<b>12</b>
5.3	MTM DETAILED .....	12
5.3.1	Report Detail .....	12
5.3.2	Report Field Descriptions .....	12
5.3.3	Record Layout .....	16
5.4	MTM T+1 .....	19
5.4.1	Report Detail .....	19
5.4.2	Report Field Descriptions .....	19
5.4.3	Record Layout .....	21
5.5	MTM VALUE TODAY .....	21
5.5.1	Report Detail .....	21
5.5.2	Report Field Descriptions .....	21
5.5.3	Record Layout .....	23
5.6	UTMTM .....	23
5.6.1	Report Detail .....	23
5.6.2	Report Field Descriptions .....	23
5.6.3	Record Layout .....	26
5.7	UTMTM + 1.....	28
5.7.1	Report Detail .....	28
5.7.2	Report Field Descriptions .....	28
5.7.3	Record Layout .....	30
5.8	UTMTM VALUE TODAY .....	30
5.8.1	Report Detail .....	30
5.8.2	Report Field Descriptions .....	30
5.8.3	Record Layout .....	32
	<b>INDEX REPORTS.....</b>	<b>33</b>
5.9	CILI.....	33
5.9.1	Report Detail .....	33
5.9.2	Report Field Descriptions .....	33
5.9.3	Record Layout .....	34
5.10	CONSTITUENTS .....	35

5.10.1	Report Detail .....	35
5.10.2	Report Field Descriptions .....	35
5.10.3	Record Layout .....	35
5.10.1	Report Detail .....	36
5.10.2	Report Field Descriptions .....	36
5.10.3	Record Layout .....	37
5.11	DAILY TRI (ATTRIBUTION REPORT) .....	38
5.11.1	Report Detail .....	38
5.11.2	Report Field Descriptions .....	38
5.11.3	Record Layout .....	41
5.12	TRI (TOTAL RETURN INDEX) .....	44
5.12.1	Report Detail .....	44
5.12.2	Report Field Descriptions .....	44
5.12.1	Record Layout .....	45
5.13	BOND DATA .....	46
5.13.1	Report Detail .....	46
5.13.2	Report Field Descriptions .....	46
5.13.3	Record Layout .....	48
TURNOVER STATS REPORTS .....		54
5.14	TRADE DETAIL .....	54
5.14.1	Report Detail .....	54
5.14.2	Report Field Descriptions .....	54
5.14.3	Record Layout .....	55
5.15	INSTRUMENT DETAIL .....	58
5.15.1	Report Detail .....	58
5.15.2	Report Field Descriptions .....	58
5.15.3	Record Layout .....	60
5.16	MEMBER/CLIENT POSITION .....	63
5.16.1	Report Detail .....	63
5.16.2	Report Field Descriptions .....	63
5.16.3	Record Layout .....	65
5.17	BONDS NON-RESIDENT .....	74
5.17.1	Report Detail .....	74
5.17.2	Report Field Descriptions .....	74

## 1 VERSION CONTROL

Version	Author	Date	Reason for Change
0.1	Maryke Vreulink and Haseel Bhima	1 November 2013	Initial Document Publication
0.2	Haseel Bhima and Khuduga Montwedi	1 September 2014	MTM changes, addition of new fields and update of MTM files.
0.3	Mark Randall	25 September 2014	Insertion of New Credit Indices layout (email only)
0.4	Tshepo Modise	18 August 2016	Removal of RMBX section and various amendments on field details
1.0	Tshepo Modise	08 September 2016	Addition of the new fields in the Trade Detail Report <ul style="list-style-type: none"> <li>a. Companion</li> <li>b. Spread</li> </ul>
1.0	Tshepo Modise	20 March 2017	Added new Base CPI field to Bond Data product
2.0	Neil Vendeiro	25 September 2018	Added new Bond ETP to Bond Data Product (section 5.1.3)
3.0	Tshepo Modise	July 2019	Updated context notes for MTM
4.0	Tshepo Modise	August 2019	Added new Clean Price field to Trade Detail data product
<u>5.0</u>	<u>Mpiti Matsoso and Neil Vendeiro</u>	<u>Nov-May 2020</u>	<u>Addition of Bond Non-Resident data product</u>

## 2 DISCLAIMER

This document is strictly for informational purposes solely for developing or operating systems for your use that interact with the market data systems of the JSE. The JSE reserves the right to withdraw, modify, or replace the specification (or any part thereof) at any time by means of a notice to contracted clients.

To the extent allowed by law, JSE does not (expressly, tacitly or impliedly) guarantee or warrant the availability, sequence, accuracy, completeness, reliability or any other aspect of any of the information contained in, linked to or distributed through this specification, or that the information contained therein is up to date.

## 3 INTRODUCTION

The aim of the JSE is to provide subscribers with Spot Bonds market statistics and reference data on a regular basis by means of a number of different data products that provide different views of the market activity.

Each subscriber can decide the type of data product(s) required from the standard offerings available and as per the fees listed on the JSE's Market Data price list.

Subscribers can elect to receive their reports via File Transfer protocol (FTP) via the JSE's Information Delivery Portal (IDP), the JSE premier FTP Server or for select products via email as well.

Contact the Market Data department via [mdclients@jse.co.za](mailto:mdclients@jse.co.za) for subscription queries/requests.

This document outlines the various connectivity requirements, which includes the delivery protocols for the access and retrieval of data files, as well as the layout of the specific data products.

The following data products are covered in this document.

Data Product	FTP Folder Location
2pm Zeros - CSV / XLS	Zerocurve 2pm
3pm Zeros - CSV / XLS	Zerocurve 3pm
Zero Curve - CSV / XLS	Zerocurve Yield
Linear Swap - XLS	Linear Swap
Yield Curve - CSV / XLS	Yield Curve
MTM Detailed - CSV / XLS(	MTM Detailed
MTMT+1 - CSV / XLS	MTMT+1
MTM Value Today - CSV / XLS	MTMVT
UTMTM - CSV / XLS	UTMTM
UTMTMT+1 - CSV / XLS	UTMTMT +1
UTMTM Value Today - CSV / XLS	UTMVtoday
CILI - CSV / XLS	CILI
Constituents - CSV / XLS	Constituents
Daily Report	Daily Report
TRI – CSV	TRI
Bond Data - CSV / XLS	Bonddata File
Trade Detail CSV / XLS	Turnover Stats

Instrument Detail CSV / XLS	Turnover Stats
Member/Client Position Detail CSV / XLS	Turnover Stats
<u>Bond Non-Resident CSV / XLS</u>	<u>Bonds Non-Resident</u>

## 4 FTP SITE ACCESS AND FILE LOCATIONS

### 4.1 FTP SITE AND FOLDERS

The data product files are made available on the Bond FTP site, which is special section of the JSE Information Delivery Portal (IDP). Access to the JSE Information Delivery Portal (IDP) is allowed via different protocols.

Refer to the IDP Connectivity document: <https://www.jse.co.za/services/market-data/technical-documents> for details.

### 4.2 ACCESS TO IDP SERVER

Access to the IDP FTP server is granted as per the following process.

1. Once you have successfully negotiated your data subscription with the Market Data department, an access instruction will be issued to configure access.
2. A representative from the Customer Services department will provide you with your IDP sign-on and dataset name before 11am on the day you go live.
3. For security governance reasons, a representative from the Information Technology division will provide you with your Password.
4. A member of the Market Data department will contact you to confirm receipt of the dataset, user Id and password.
5. The onus is on you to test as soon as you have received the above-mentioned information to ensure that you will gain access to the system.

Should you experience any problems relating to the information communicated to you or the actual testing of access to the data file(s), please contact the following contact number(s) for assistance:

Customer Support 011 520 7777 / 7799

## 5 RETRIEVING DATA PRODUCT FILES

All data product files available on the Bond FTP site on the IDP server can be retrieved as follows:

- ftp bondftp.jse.co.za - 196.216.152.24 / Internet - 41.208.2.229
- supply user name and password
- cd "report"
- cd csv / xls
- get <file name>

## ZERO CURVES

### 5.1 ZERO CURVE

The JSE Zero-Coupon Yield Curves are a daily suite of three yield curves. One to cover the nominal bond market, one the nominal swaps market, and one to cover the inflation-linked bond market. Each curve will be a “perfect fit” curve, in the sense that each curve will exactly price back all of its inputs.

#### 5.1.1 Report Detail

The Zero Curve Report is a report that gives 3 yield curves which are based on:

- **Bonds Curve:** This curve provides the bonds which are used as inputs along with their Mark to market rate.
- **Swaps Curve:** This curve provides the swaps and FRAs which are used as inputs along with their mark to market rate.
- **Real Bonds Curve:** This curve provides the bonds which are used as inputs along with their Mark to market rate.

These curves can be used to discount cash flows.

This report is currently disseminated daily at 14h30, 15h30 and 17h30 (South African Times), and is available via the JSE IDP (Information Delivery Portal) or via email.

The three reports can respectively be retrieved by following the below steps mentioned in point 5.

#### 5.1.2 Report Field Descriptions

##### Worksheet 1: Zeroes

DATE	The dates of the dissemination run, in the format CCYY/MM/DD.
BOND CURVE (NACC)	Nominal zero-coupon bond yields which are Nominal Annual Compounded Continuously (NACC).
SWAP CURVE (NACC)	Nominal zero-coupon swap yields which are Nominal Annual Compounded Continuously (NACC).
REAL CURVE (NACC)	Real zero-coupon swap yields which are Nominal Annual Compounded Continuously (NACC).

##### Worksheet 2: Compact

##### ZERO CURVES

PERIOD	The period of how far the corresponding date is from the valuation date.
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NOMINAL SWAP (NACQ)	Nominal zero-coupon bond yields which are Nominal Annual Compounded Quarterly (NACQ).
NOMINAL BOND (NACS)	Nominal zero-coupon bond yields which are Nominal Annual Compounded Semi-Annually (NACS).
REAL BOND (NACS)	Real zero-coupon bond yields which are Nominal Annual Compounded Semi-Annually (NACS).

#### PAR/SWAP CURVES

PERIOD	The period of how far the corresponding date is from the valuation date.
NOMINAL SWAP (NACQ)	Par swap yields calibrated off the Nominal Swap Zero Curve. Compounded NACQ.
NOMINAL BOND (NACS)	Par swap yields calibrated off the Nominal Bond Zero Curve. Compounded NACS.
REAL BOND (NACS)	Par swap yields calibrated off the Real Bond Zero Curve. Compounded NACS.

#### **Worksheet 3: Inputs**

##### BOND CURVE

CODE	The code or name of the bond used in the Nominal Bond Curve inputs.
MTM	The Mark To Market yield of the corresponding bond.

##### SWAP CURVE

CODE	The code or name of the swaps used as Nominal Swap Curve inputs.
MTM	The MTM swap rate.

##### REAL CURVE

CODE	The code or name of the bonds used as Real Bond Curve inputs.
MTM	The MTM yield of the corresponding bond.



### 5.1.3 Record Layout

#### Excel Report(s)

Report Name	ZeroCurve<CCYYMMDD>.xls		
Sheet Name	Zeroes		
Heading			
	Actual/<Pattern>/(Example)	Cell	
Column headings	(Bond Curve (NACC))	A1-D1	
Detail			
Field Name		Cells	Field Type
Date		>=A2	Date time
Bond Curve (NACC)		>=B2	Float
Swap Curve (NACC)		>=C2	Float
Real Curve (NACC)		>=D2	Float

Sheet Name	Compact	
Heading		
	Actual/<Pattern>/(Example)	Cell
Column headings	(Zero Curves - Nominal Swap (NACQ))	A1-K2
Detail		
Field Name	Cells	Field Type
Zero Curves - Period	>=A3	Varchar(20)
Zero Curves - Date	>=B3	Date time
Zero Curves - Nominal Swap (NACQ)	>=C3	Float
Zero Curves - Nominal Bond (NACS)	>=D3	Float
Zero Curves - Real Bond (NACS)	>=E4	Float
Par/Swap Curves - Period	>=G3	Varchar(20)
Par/Swap Curves - Date	>=H3	Date time
Par/Swap Curves - Nominal Swap (NACQ)	>=I3	Float
Par/Swap Curves - Nominal Bond (NACS)	>=J3	Float
Par/Swap Curves - Real Bond (NACS)	>=K3	Float

Sheet Name	Inputs		
Heading			
	Actual/<Pattern>/(Example)	Cell	
Column headings	(Bond Curve - Code)	A1-H2	
Detail			
Field Name		Cells	Field Type
Bond Curve - Code		>=A3	Varchar(20)
Bond Curve - MTM		>=B3	Float
Swap Curve - Code		>=D3	Varchar(20)

Swap Curve - MTM	>=E3	Float
Real Curve - Code	>=G3	Varchar(20)
Real Curve - MTM	>=H3	Float

## 5.2 LINEAR SWAP CURVE

### 5.2.1 Report Detail

The linear swap curve reports represents a linear interpolation of the par swap rates and the FRA rates used to construct the nominal swap curve.

This report is currently disseminated daily at 17h30 and is available via the JSE IDP (Information Delivery Portal) and email.

### 5.2.2 Report Field Descriptions

#### Worksheet 1: Inputs

DATE	Dissemination date - The date of the dissemination run, in the format CCYY/MM/DD.
CODE	The code indicating the type of information contained in the record disseminated - e.g.: 1ddm.
MtM	The Mark to Market rate for the corresponding code.

#### Worksheet 2: Outputs

VALUATION DATE	VALUATION DATE - The date of the valuation, in the format DD-MM-YY.
PERIOD (years)	The period in years of how far the dissemination date is from the valuation date.
DATE	The date of the valuation in the format DD/MM/YY.

### 5.2.3 Record Layout

#### Excel Report(s)

Report Name	LinearSwapCurve_<CCYYMMDD>.xls		
Sheet Name	Inputs		
Heading			
	Actual/<Pattern>/(Example)	Field Type	Cell
Report Title			
Report Date	<dd-mmm-yy>	datetime	B1
Column headings	(MTM)		A2-B2
Detail			
Field Name		Field Type	Cells
Code		varchar(10)	A3-A31
MtM		float	B3-B31

Sheet Name	Outputs		
Heading			
	Actual/<Pattern>/(Example)	Field Type	Cell
Report Title			
Report Date	<dd-mmm-yy>	datetime	C1
Column headings	(Date)		A2-C2
Detail			
Field Name		Field Type	Cells
Period (years)		datetime	A3-A130
Date		datetime	B3-B130
Spot Rates		float	C3-C130

Sheet Name	Outputs		
Heading			
	Actual/<Pattern>/(Example)	Field Type	Cell
Report Title			
Report Date	<dd-mmm-yy>	datetime	C1
Column headings	(Date)		A2-C2
Detail			
Field Name		Field Type	Cells
Period (years)		datetime	A3-A130
Date		datetime	B3-B130
Spot Rates		float	C3-C130

## MARK TO MARKET (MTM) REPORTS

MTM is used to value bond portfolios and is a representation of the Mark to Market at various times on a daily basis. The MTM can be used as a closing price.

There are six MTM Reports run on a daily basis, only differing in settlement dates, and run at different times during the day.

Three MTM Reports showing 17:00 data, are disseminated and available to clients at 17:30 and will include MTM Detailed, MTM T+1 and MTM Value Today.

The other MTM reports are UTMTM (Unit Trust MTM) Reports, showing 15:00 data, disseminated and available to clients at 15:30, and will include UTMTM, UTMTM T+1, UTMTM Value Today.

Reports will be available in both xls and csv format.

### 5.3 MTM DETAILED

#### 5.3.1 Report Detail

The MTM Detailed report is a report showing all cash flows discounted back from Maturity date to Settlement date, and assumes all valuations for T+3 settlement. It will exclude any trades which were reported and cancelled on the same day, but will include any back dated trades reported on the day.

This report consists of the MTM, BEASSA TRI (Total Return Index), COBI TRI (Credit Indices) and the Yield Curve. All other MTM reports will only consist of the MTM data, excluding BEASSA TRI, COBI TRI and Yield Curve data.

The report will be available at 17:30 daily.

#### 5.3.2 Report Field Descriptions

##### Worksheet 1: MTM

TRADE DATE	The date the report is relevant for
SETTLEMENT	The date for which all instruments are valued. All cash flows are discounted back from maturity date to this date
BOND CODE	The short code for each listed instrument
ISIN CODE	The unique ISIN code for each listed instrument. Will be a ZAG code
MATURITY	The date the instrument will redeem. (This is the date from which the maturity cash-flow will be discounted from)
COUPON	Interest rate payable by the issuer to investors
COMPANION BOND	The short code of a more liquid companion instrument to assist in the re-valuation of parallel shifts in the yield curve. Usually

	governments bonds will be used as the companion bond. (Not all instruments will have a companion bond)
BP (Basis-point) SPREAD	The spread above the companion bond which denotes the credit component of the instruments yield
MTM	The marked to market yield of the listed instrument
ALL IN PRICE	The price of the listed bond based on the mark to market yield including interest, all based on a nominal of 100 bonds
CLEAN PRICE	The price of the listed bond based on the mark to market yield excluding interest, all based on a nominal of 100 bonds
ACCRUED INTEREST	The interest due to the buyer or seller. All based on nominal of 100 bonds
YEAR HIGH YIELD	The highest mark to market yield for the year
YEAR LOW YIELD	The lowest mark to market yield for the year
RETURN (YTD)	Basis point change since the beginning of the year
DURATION	Measures the price volatility and interest rate sensitivity of the instrument
MODIFIED DURATION	The duration of a financial asset that consists of fixed cash flows, for example a bond, is the weighted average of the times until those fixed cash flows is received. The duration also measures the price sensitivity to yield, the rate of change of price with respect to yield or the percentage change in price for a parallel shift in yields.
DELTA	The ratio comparing the change in the price of the instrument
RAND PER BASIS POINT	The rand value change of R1 million bonds should the yield of the instrument move one basis point (0.01%)
CONVEXITY	A measure of the sensitivity of the duration of a bond to changes in interest rates. The higher the convexity the more sensitive the bond price to the change in IR's.
YIELD VOLATILITY	For future use (Column currently not populated/used)
MTM CHANGE	Why the MTM changed
MTM PROCESS METHODOLOGY	The methodology/process that the exchange used to value the bond for MTM purposes
LAST TRADE DATE	The last date the specific instrument traded
LAST MTM CHANGE DATE	The last date the MTM for a particular instrument changed

YIELD/PRICE INDICATOR	Indicates whether or not the instrument is traded as price or yield
INDEX RATIO	Provide the multiplicative factor used to calculate inflation linked bond prices
BASE CPI	Business to provide definition
REFERENCE CPI	Business to provide definition

## **Worksheet 2: BEASSA TRI**

VALUATION DATE (t)	The date the report is relevant for
SECTOR	The sub index short code. For example ALBI, GOVI, OTHI, or as ALBI Term splits
CLEAN PRICE INDEX	The index level of the sub index/sector (for example GOVI) on valuation date based on clean price index methodology (excluding interest)
INTEREST YIELD	Interest component (accrued interest due to the clean price index). Refer to clean price index methodology
TOTAL RETURN INDEX	The index level of the sub index/sector (for example GOVI) on valuation date based on the BEASSA TRI index methodology
TRI AVERAGE YIELD	The average yield of the sub index/sector of all constituents
MODIFIED DURATION	The duration of a financial asset that consists of fixed cash flows, for example a bond, is the weighted average of the times until those fixed cash flows is received. The duration also measures the price sensitivity to yield, the rate of change of price with respect to yield or the percentage change in price for a parallel shift in yields.
CONVEXITY	A measure of the curvature in the relationship between bond prices and bond yields that demonstrates how the duration of a bond changes as the interest rate changes
TOTAL RETURN MtD	The return of the sub index/sector for the month to date as based on the TRI
TOTAL RETURN YtD	The return of the sub index/sector for the year to date as based on the TRI

TOTAL RETURN YonY	The return of the sub index/sector for the year on year as based on the TRI
K FACTOR 'DATE'	A rebalancing factor on valuation date which caters for coupons/values vested in the sub sector/index
K FACTOR 'DATE + 1'	A rebalancing factor on valuation for the following day which caters for coupons/values vested in the sub sector/index

### **Worksheet 3: BEASSA YIELD CURVE**

DATE	The date the report is relevant for in the format CCYY/MM/DD
TIME TO MATURITY	Time between when the bond was issued and when it matures (maturity date), at which time the issuer must redeem the bond by paying the principal
YIELD TO MATURITY	The rate of return anticipated on a bond if it is held until the maturity date. (It is assumed that all coupons are reinvested at the same rate)

### **Worksheet 4: CREDIT INDICES**

VALUATION DATE (t)	The date the report is relevant for
SECTOR	The sub index short code. For example ALBI, GOVI, OTHI, or as ALBI Term splits
TOTAL RETURN MtD	The return of the sub index/sector for the month to date as based on the TRI
TOTAL RETURN YtD	The return of the sub index/sector for the year to date as based on the TRI
TOTAL RETURN YonY	The return of the sub index/sector for the year on year as based on the TRI
K FACTOR 'DATE'	A rebalancing factor on valuation date which caters for coupons/values vested in the sub sector/index
K FACTOR 'DATE + 1'	A rebalancing factor on valuation for the following day which caters for coupons/values vested in the sub sector/index

### 5.3.3 Record Layout

#### Excel Report(s)

<b>Report Name</b>	MTMDetailed<CCYYMMDD>.xls		
<b>Sheet Name</b>	MTM		
<b>Heading</b>			
	<b>Actual/&lt;Pattern&gt;/(Example)</b>	<b>Field Type</b>	<b>Cell</b>
<b>Report Title</b>	Detailed Daily MTM - Extract	varchar(100)	I2
<b>Trade date</b>	<dd-mmm-yy>	datetime	C4
<b>Settlement Date</b>	<dd-mmm-yy>	datetime	C5
<b>Column headings</b>	(Bond Code)		B6-AB6
<b>Detail</b>			
<b>Field Name</b>		<b>Field Type</b>	<b>Cells</b>
Bond Code		varchar(20)	>=B7
ISIN Code		varchar(20)	>=C7
Maturity		datetime	>=D7
Coupon		float	>=E7
Companion Bond		varchar(20)	>=F7
BP Spread		float	>=G7
MTM		float	>=H7
All in price		float	>=I7
Clean Price		float	>=J7
Accrued Interest		float	>=K7
Year High Yield		float	>=L7
Year Low Yield		float	>=M7
Return (YTD)		float	>=N7
Duration		float	>=O7
Modified Duration		float	>=P7
Delta		float	>=Q7
Rand per Basis Point		float	>=R7
Convexity		float	>=S7
Yield Volatility		float	>=T7
Yield/Price Indicator		varchar(20)	>=U7
Last Trade Date		Datetime	>=V7
Last MTM Change Date		Datetime	>=W7
Index Ratio		float	>=X7
Base CPI		float	>=Y7
Reference CPI		float	>=Z7
MTM Process Methodology		varchar(100)	>=AA7
MTM Change		Currently empty	>=AB7



<b>Report Name</b>	MTMDetailed<CCYYMMDD>.xls		
<b>Sheet Name</b>	BEASSA TRI		
<b>Heading</b>			
	<b>Actual/&lt;Pattern&gt;/(Example)</b>	<b>Field Type</b>	<b>Cell</b>
<b>Report Title</b>	BEASSA Total Return Indices	varchar(100)	F2
<b>Report Date</b>	<dd mmm yy>	datetime	C5
<b>Column headings</b>	(Sector)		B6-M6
<b>Detail</b>			
<b>Field Name</b>		<b>Field Type</b>	<b>Cells</b>
Sector		varchar(100)	B7-B14
Clean Price Index		float	C7-C14
Interest Yield		float	D7-D14
Total Return Index		float	E7-E14
TRI Average Yield		float	F7-F14
Modified Duration		float	G7-G14
Convexity		float	H7-H14
Total Return MtD		float	I7-I14
Total Return YtD		float	J7-J14
Total Return YonY		float	K7-K14
K Factor <dd mmm>		float	L7-L14
K Factor <dd mmm>		float	M7-M14

<b>Report Name</b>	MTMDetailedUpdated<CCYYMMDD>.xls		
<b>Sheet Name</b>	BEASSA Yield Curve		
<b>Heading</b>			
	<b>Actual/&lt;Pattern&gt;/(Example)</b>	<b>Field Type</b>	<b>Cell</b>
<b>Report Title</b>	BEASSA Yield Curve	varchar(100)	I3
<b>Report Date</b>	<dd mmm yy>	datetime	C6
<b>Column headings</b>	(Time to Maturity)		B7-C7
<b>Detail</b>			
<b>Field Name</b>		<b>Field Type</b>	<b>Cells</b>
Time to Maturity		datetime	B8-B128
Yield to Maturity		float	C8-C128

<b>Report Name</b>	MTMDetailed<CCYYMMDD>.xls		
<b>Sheet Name</b>	<b>Credit Indices</b>		
<b>Heading</b>			
	<b>Actual/&lt;Pattern&gt;/(Example)</b>	<b>Field Type</b>	<b>Cell</b>
<b>Report Title</b>	JSE Credit Indices	varchar(100)	D2
<b>Report Date</b>	<dd mmm yy>	datetime	C5
<b>Column headings</b>	(Sector)		B6-H6
<b>Detail</b>			
<b>Field Name</b>		<b>Field Type</b>	<b>Cells</b>
Sector		varchar(100)	B7-B24
Total Return Index		float	C7-C24
Total Return MtD		float	D7-D24
Total Return YtD		float	E7-E24
Total Return YonY		float	F7-F24
K Factor <dd mmm>		float	G7-G19
K Factor <dd mmm>		float	H7-H19

## CSV Report(s)

<b>Report Name</b>	MTMDetail<CCYYMMDD>.csv		
<b>Report type</b>	<b>CSV</b>		
<b>Delimiter</b>	comma ",",		
<b>Total rows</b>	Varies		
<b>Total columns</b>	Fixed - 26		
<b>Heading</b>			
	<b>Actual/&lt;Pattern&gt;/(Example)</b>	<b>Field Type</b>	<b>Row, Column</b>
<b>Report Title</b>	MTMDetailedUpdatedCCYYMMDD	varchar(100)	1, 9
<b>Trade date</b>	<dd-mmm-yy>	datetime	3, 3
<b>Settlement date</b>	<dd-mmm-yy>	datetime	4, 3
<b>Column headings</b>	(Bond Code)		5, (2-26)
<b>Detail</b>			
<b>Field Name</b>		<b>Field Type</b>	<b>Column No.</b>
Bond Code		varchar(20)	2
ISIN Code		varchar(20)	3
Maturity		datetime	4
Coupon		float	5
Companion Bond		varchar(20)	6
BP Spread		float	7
MTM		float	8

All in price	float	9
Clean Price	float	10
Accrued Interest	float	11
Year High Yield	float	12
Year Low Yield	float	13
Return (YTD)	float	14
Duration	float	15
Modified Duration	float	16
Delta	float	17
Rand per Basis Point	float	18
Convexity	float	19
Yield Volatility	float	20
<b>Yield/Price Indicator</b>	varchar(20)	21
<b>Last Trade Date</b>	Datetime	22
<b>Last MTM Change Date</b>	Datetime	23
<b>Index Ratio</b>	float	24
<b>Base CPI</b>	float	25
<b>Reference CPI</b>	float	26
<b>MTM Process Methodology</b>	varchar(100)	27
<b>MTM Change</b>	Currently empty	28

## 5.4 MTM T+1

### 5.4.1 Report Detail

The MTM T+1 report is a report showing all cash flows discounted back from Maturity date to Settlement date, and assumes all valuations for T+1 settlement. It will exclude any trades which were reported and cancelled on the same day, but will include any back dated trades reported on the day.

The report will be available at 17:30 pm daily.

### 5.4.2 Report Field Descriptions

#### Worksheet 1: MTM

TRADE DATE	The date the report is relevant for
SETTLEMENT	The date for which all instruments are valued. All cash flows are discounted back from maturity date to this date
BOND CODE	The short code for each listed instrument
ISIN CODE	The unique ISIN code for each listed instrument. Will be a ZAG code
MATURITY	The date the instrument will redeem. (This is the date from which the maturity cash-flow will be discounted from)
COUPON	Interest rate payable by the issuer to investors

COMPANION BOND	The short code of a more liquid companion instrument to assist in the re-valuation of parallel shifts in the yield curve. Usually governments bonds will be used as the companion bond. (Not all instruments will have a companion bond)
BP (Basis-point) SPREAD	The spread above the companion bond which denotes the credit component of the instruments yield
MTM	The marked to market yield of the listed instrument
ALL IN PRICE	The price of the listed bond based on the mark to market yield including interest, all based on a nominal of 100 bonds
CLEAN PRICE	The price of the listed bond based on the mark to market yield excluding interest, all based on a nominal of 100 bonds
ACCRUED INTEREST	The interest due to the buyer or seller. All based on nominal of 100 bonds
YEAR HIGH YIELD	The highest mark to market yield for the year
YEAR LOW YIELD	The lowest mark to market yield for the year
RETURN (YTD)	Basis point change since the beginning of the year
DURATION	Measures the price volatility and interest rate sensitivity of the instrument
MODIFIED DURATION	The duration of a financial asset that consists of fixed cash flows, for example a bond, is the weighted average of the times until those fixed cash flows is received. The duration also measures the price sensitivity to yield, the rate of change of price with respect to yield or the percentage change in price for a parallel shift in yields.
DELTA	The ratio comparing the change in the price of the instrument
RAND PER BASIS POINT	The rand value change of R1 million bonds should the yield of the instrument move one basis point (0.01%)
CONVEXITY	A measure of the sensitivity of the duration of a bond to changes in interest rates. The higher the convexity the more sensitive the bond price to the change in IR's.
YIELD VOLATILITY	For future use (Column currently not populated/used)
MTM CHANGE	Why the MTM changed
MTM PROCESS METHODOLOGY	The methodology/process that the exchange used to value the bond for MTM purposes
LAST TRADE DATE	The last date the specific instrument traded

LAST MTM CHANGE DATE	The last date the MTM for a particular instrument changed
YIELD/PRICE INDICATOR	Indicates whether or not the instrument is traded as price or yield
INDEX RATIO	Provide the multiplicative factor used to calculate inflation linked bond prices
BASE CPI	Indicates the CPI value in relation to the settlement date on which the issue took place
REFERENCE CPI	Indicates the CPI value in relation to the settlement date on which the trade took place

#### 5.4.3 Record Layout

Refer to section 5.3.3 – Record Layout, Sheet Name – Detailed MTM (xls, csv)

### 5.5 MTM VALUE TODAY

#### 5.5.1 Report Detail

The MTM Value Today report is a report showing all cash flows discounted back from Maturity date to Settlement date, and assumes all valuations for T+0 settlement. It will exclude any trades which were reported and cancelled on the same day, but will include any back dated trades reported on the day.

The report will be available at 17:30 pm daily.

#### 5.5.2 Report Field Descriptions

##### Worksheet 1: MTM

TRADE DATE	The date the report is relevant for
SETTLEMENT	The date for which all instruments are valued. All cash flows are discounted back from maturity date to this date
BOND CODE	The short code for each listed instrument
ISIN CODE	The unique ISIN code for each listed instrument. Will be a ZAG code
MATURITY	The date the instrument will redeem. (This is the date from which the maturity cash-flow will be discounted from)
COUPON	Interest rate payable by the issuer to investors
COMPANION BOND	The short code of a more liquid companion instrument to assist in the re-valuation of parallel shifts in the yield curve. Usually

	governments bonds will be used as the companion bond. (Not all instruments will have a companion bond)
BP (Basis-point) SPREAD	The spread above the companion bond which denotes the credit component of the instruments yield
MTM	The marked to market yield of the listed instrument
ALL IN PRICE	The price of the listed bond based on the mark to market yield including interest, all based on a nominal of 100 bonds
CLEAN PRICE	The price of the listed bond based on the mark to market yield excluding interest, all based on a nominal of 100 bonds
ACCRUED INTEREST	The interest due to the buyer or seller. All based on nominal of 100 bonds
YEAR HIGH YIELD	The highest mark to market yield for the year
YEAR LOW YIELD	The lowest mark to market yield for the year
RETURN (YTD)	Basis point change since the beginning of the year
DURATION	Measures the price volatility and interest rate sensitivity of the instrument
MODIFIED DURATION	The duration of a financial asset that consists of fixed cash flows, for example a bond, is the weighted average of the times until those fixed cash flows is received. The duration also measures the price sensitivity to yield, the rate of change of price with respect to yield or the percentage change in price for a parallel shift in yields.
DELTA	The ratio comparing the change in the price of the instrument
RAND PER BASIS POINT	The rand value change of R1 million bonds should the yield of the instrument move one basis point (0.01%)
CONVEXITY	A measure of the sensitivity of the duration of a bond to changes in interest rates. The higher the convexity the more sensitive the bond price to the change in IR's.
YIELD VOLATILITY	For future use (Column currently not populated/used)
MTM CHANGE	Why the MTM changed
MTM PROCESS METHODOLOGY	The methodology/process that the exchange used to value the bond for MTM purposes
LAST TRADE DATE	The last date the specific instrument traded
LAST MTM CHANGE DATE	The last date the MTM for a particular instrument changed

YIELD/PRICE INDICATOR	Indicates whether or not the instrument is traded as price or yield
INDEX RATIO	Provide the multiplicative factor used to calculate inflation linked bond prices
BASE CPI	Indicates the CPI value in relation to the settlement date on which the issue took place
REFERENCE CPI	Indicates the CPI value in relation to the settlement date on which the trade took place

### 5.5.3 Record Layout

Refer to section 5.3.3 – Record Layout, Sheet Name – Detailed MTM (xls, csv)

## 5.6 UTMTM

### 5.6.1 Report Detail

The UTMTM (Unit Trust MTM) report is a report showing all cash flows discounted back from Maturity date to Settlement date, and assumes all valuations for T+3 settlement. It will exclude any trades which were reported and cancelled on the same day, but will include any back dated trades reported on the day.

This report will be available at 15:30 daily.

### 5.6.2 Report Field Descriptions

#### Worksheet 1: MTM

TRADE DATE	The date the report is relevant for
SETTLEMENT	The date for which all instruments are valued. All cash flows are discounted back from maturity date to this date
BOND CODE	The short code for each listed instrument
ISIN CODE	The unique ISIN code for each listed instrument. Will be a ZAG code
MATURITY	The date the instrument will redeem. (This is the date from which the maturity cash-flow will be discounted from)
COUPON	Interest rate payable by the issuer to investors
COMPANION BOND	The short code of a more liquid companion instrument to assist in the re-valuation of parallel shifts in the yield curve. Usually governments bonds will be used as the companion bond. (Not all instruments will have a companion bond)

BP (Basis-point) SPREAD	The spread above the companion bond which denotes the credit component of the instruments yield
MTM	The marked to market yield of the listed instrument
ALL IN PRICE	The price of the listed bond based on the mark to market yield including interest, all based on a nominal of 100 bonds
CLEAN PRICE	The price of the listed bond based on the mark to market yield excluding interest, all based on a nominal of 100 bonds
ACCRUED INTEREST	The interest due to the buyer or seller. All based on nominal of 100 bonds
YEAR HIGH YIELD	The highest mark to market yield for the year
YEAR LOW YIELD	The lowest mark to market yield for the year
RETURN (YTD)	Basis point change since the beginning of the year
DURATION	Measures the price volatility and interest rate sensitivity of the instrument
MODIFIED DURATION	The duration of a financial asset that consists of fixed cash flows, for example a bond, is the weighted average of the times until those fixed cash flows is received. The duration also measures the price sensitivity to yield, the rate of change of price with respect to yield or the percentage change in price for a parallel shift in yields.
DELTA	The ratio comparing the change in the price of the instrument
RAND PER BASIS POINT	The rand value change of R1 million bonds should the yield of the instrument move one basis point (0.01%)
CONVEXITY	A measure of the sensitivity of the duration of a bond to changes in interest rates. The higher the convexity the more sensitive the bond price to the change in IR's.
YIELD VOLATILITY	For future use (Column currently not populated/used)
MTM CHANGE	Why the MTM changed
MTM PROCESS METHODOLOGY	The methodology/process that the exchange used to value the bond for MTM purposes
LAST TRADE DATE	The last date the specific instrument traded
LAST MTM CHANGE DATE	The last date the MTM for a particular instrument changed



YIELD/PRICE INDICATOR	Indicates whether or not the instrument is traded as price or yield
INDEX RATIO	Provide the multiplicative factor used to calculate inflation linked bond prices
BASE CPI	Indicates the CPI value in relation to the settlement date on which the issue took place
REFERENCE CPI	Indicates the CPI value in relation to the settlement date on which the trade took place

### 5.6.3 Record Layout

#### Excel Report(s)

<b>Report Name</b>	UTMTM<CCYYMMDD>.xls		
<b>Sheet Name</b>	UTMTM<CCYYMMDD>		
<b>Heading</b>			
	<b>Actual/&lt;Pattern&gt;/(Example)</b>	<b>Field Type</b>	<b>Cell</b>
<b>Report Title</b>	Bond Valuations for Unit Trusts	varchar(100)	C2
<b>Trade date</b>	<dd-mmm-yy>	datetime	C4
<b>Settlement Date</b>	<dd-mmm-yy>	datetime	C5
<b>Column headings</b>	(Bond Code)		B6-AB6
<b>Detail</b>			
<b>Field Name</b>		<b>Field Type</b>	<b>Cells</b>
Bond Code		varchar(20)	>=B7
ISIN Code		varchar(20)	>=C7
Maturity		datetime	>=D7
Coupon		float	>=E7
Companion Bond		varchar(20)	>=F7
BP Spread		float	>=G7
MTM		float	>=H7
All in price		float	>=I7
Clean Price		float	>=J7
Accrued Interest		float	>=K7
Year High Yield		float	>=L7
Year Low Yield		float	>=M7
Return (YTD)		float	>=N7
Duration		float	>=O7
Modified Duration		float	>=P7
Delta		float	>=Q7
Rand per Basis Point		float	>=R7
Convexity		float	>=S7
Yield Volatility		float	>=T7
Yield/Price Indicator		varchar(20)	>=U7
Last Trade Date		Datetime	>=V7
Last MTM Change Date		Datetime	>=W7
Index Ratio		float	>=X7
Base CPI		float	>=Y7
Reference CPI		float	>=Z7
MTM Process Methodology		varchar(100)	>=AA7
MTM Change		Currently empty	>=AB7

## CSV Report(s)

Report Name	UTMTM<CCYYMMDD>.csv		
Report type	CSV		
Delimiter	comma ",",		
Total rows	Varies		
Total columns	Fixed - 28		
Heading			
	Actual/<Pattern>/(Example)	Field Type	Row, Column
Report Title	Bond Valuations for Unit Trusts	varchar(100)	1, 3
Trade date	<dd-mmm-yy>	datetime	3, 3
Settlement date	<dd-mmm-yy>	datetime	4, 3
Column headings	(Bond Code)		5, (2-28)
Detail			
Field Name		Field Type	Column No.
Bond Code		varchar(20)	2
ISIN Code		varchar(20)	3
Maturity		datetime	4
Coupon		float	5
Companion Bond		varchar(20)	6
BP Spread		float	7
MTM		float	8
All in price		float	9
Clean Price		float	10
Accrued Interest		float	11
Year High Yield		float	12
Year Low Yield		float	13
Return (YTD)		float	14
Duration		float	15
Modified Duration		float	16
Delta		float	17
Rand per Basis Point		float	18
Convexity		float	19
Yield Volatility		float	20
Yield/Price Indicator		varchar(20)	21
Last Trade Date		Datetime	22
Last MTM Change Date		Datetime	23
Index Ratio		float	24
Base CPI		float	25
Reference CPI		float	26
MTM Process Methodology		varchar(100)	27

MTM Change	Currently empty	28
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## 5.7 **UTMTM + 1**

### 5.7.1 **Report Detail**

The UTMTM+1 report is a report showing all cash flows discounted back from Maturity date to Settlement date, and assumes all valuations for T+1 settlement. It will exclude any trades which were reported and cancelled on the same day, but will include any back dated trades reported on the day.

This report will be available at 15:30 daily.

### 5.7.2 **Report Field Descriptions**

#### **Worksheet 1: MTM**

TRADE DATE	The date the report is relevant for
SETTLEMENT	The date for which all instruments are valued. All cash flows are discounted back from maturity date to this date
BOND CODE	The short code for each listed instrument
ISIN CODE	The unique ISIN code for each listed instrument. Will be a ZAG code
MATURITY	The date the instrument will redeem. (This is the date from which the maturity cash-flow will be discounted from)
COUPON	Interest rate payable by the issuer to investors
COMPANION BOND	The short code of a more liquid companion instrument to assist in the re-valuation of parallel shifts in the yield curve. Usually governments bonds will be used as the companion bond. (Not all instruments will have a companion bond)
BP (Basis-point) SPREAD	The spread above the companion bond which denotes the credit component of the instruments yield
MTM	The marked to market yield of the listed instrument
ALL IN PRICE	The price of the listed bond based on the mark to market yield including interest, all based on a nominal of 100 bonds
CLEAN PRICE	The price of the listed bond based on the mark to market yield excluding interest, all based on a nominal of 100 bonds
ACCRUED INTEREST	The interest due to the buyer or seller. All based on nominal of 100 bonds
YEAR HIGH YIELD	The highest mark to market yield for the year

YEAR LOW YIELD	The lowest mark to market yield for the year
RETURN (YTD)	Basis point change since the beginning of the year
DURATION	Measures the price volatility and interest rate sensitivity of the instrument
MODIFIED DURATION	The duration of a financial asset that consists of fixed cash flows, for example a bond, is the weighted average of the times until those fixed cash flows is received. The duration also measures the price sensitivity to yield, the rate of change of price with respect to yield or the percentage change in price for a parallel shift in yields.
DELTA	The ratio comparing the change in the price of the instrument
RAND PER BASIS POINT	The rand value change of R1 million bonds should the yield of the instrument move one basis point (0.01%)
CONVEXITY	A measure of the sensitivity of the duration of a bond to changes in interest rates. The higher the convexity the more sensitive the bond price to the change in IR's.
YIELD VOLATILITY	For future use (Column currently not populated/used)
MTM CHANGE	Why the MTM changed
MTM PROCESS METHODOLOGY	The methodology/process that the exchange used to value the bond for MTM purposes
LAST TRADE DATE	The last date the specific instrument traded
LAST MTM CHANGE DATE	The last date the MTM for a particular instrument changed
YIELD/PRICE INDICATOR	Indicates whether or not the instrument is traded as price or yield
INDEX RATIO	Provide the multiplicative factor used to calculate inflation linked bond prices
BASE CPI	Indicates the CPI value in relation to the settlement date on which the issue took place
REFERENCE CPI	Indicates the CPI value in relation to the settlement date on which the trade took place

### 5.7.3 Record Layout

Refer to section 5.6.3 – UTMTM Record Layout

## 5.8 UTMTM VALUE TODAY

### 5.8.1 Report Detail

The UTMTM Value Today report is a report showing all cash flows discounted back from Maturity date to Settlement date, and assumes all valuations for T+0 settlement. It will exclude any trades which were reported and cancelled on the same day, but will include any back dated trades reported on the day.

This report will be available at 15:30 daily.

### 5.8.2 Report Field Descriptions

#### Worksheet 1: MTM

TRADE DATE	The date the report is relevant for
SETTLEMENT	The date for which all instruments are valued. All cash flows are discounted back from maturity date to this date
BOND CODE	The short code for each listed instrument
ISIN CODE	The unique ISIN code for each listed instrument. Will be a ZAG code
MATURITY	The date the instrument will redeem. (This is the date from which the maturity cash-flow will be discounted from)
COUPON	Interest rate payable by the issuer to investors
COMPANION BOND	The short code of a more liquid companion instrument to assist in the re-valuation of parallel shifts in the yield curve. Usually governments bonds will be used as the companion bond. (Not all instruments will have a companion bond)
BP (Basis-point) SPREAD	The spread above the companion bond which denotes the credit component of the instruments yield
MTM	The marked to market yield of the listed instrument

ALL IN PRICE	The price of the listed bond based on the mark to market yield including interest, all based on a nominal of 100 bonds
CLEAN PRICE	The price of the listed bond based on the mark to market yield excluding interest, all based on a nominal of 100 bonds
ACCRUED INTEREST	The interest due to the buyer or seller. All based on nominal of 100 bonds
YEAR HIGH YIELD	The highest mark to market yield for the year
YEAR LOW YIELD	The lowest mark to market yield for the year
RETURN (YTD)	Basis point change since the beginning of the year
DURATION	Measures the price volatility and interest rate sensitivity of the instrument
MODIFIED DURATION	The duration of a financial asset that consists of fixed cash flows, for example a bond, is the weighted average of the times until those fixed cash flows is received. The duration also measures the price sensitivity to yield, the rate of change of price with respect to yield or the percentage change in price for a parallel shift in yields.
DELTA	The ratio comparing the change in the price of the instrument
RAND PER BASIS POINT	The rand value change of R1 million bonds should the yield of the instrument move one basis point (0.01%)
CONVEXITY	A measure of the sensitivity of the duration of a bond to changes in interest rates. The higher the convexity the more sensitive the bond price to the change in IR's.
YIELD VOLATILITY	For future use (Column currently not populated/used)
MTM CHANGE	Why the MTM changed
MTM PROCESS METHODOLOGY	The methodology/process that the exchange used to value the bond for MTM purposes
LAST TRADE DATE	The last date the specific instrument traded

LAST MTM CHANGE DATE	The last date the MTM for a particular instrument changed
YIELD/PRICE INDICATOR	Indicates whether or not the instrument is traded as price or yield
INDEX RATIO	Provide the multiplicative factor used to calculate inflation linked bond prices
BASE CPI	Indicates the CPI value in relation to the settlement date on which the issue took place
REFERENCE CPI	Indicates the CPI value in relation to the settlement date on which the trade took place

### 5.8.3 **Record Layout**

Refer to section 5.6.3 – UTMTM Record Layout



## INDEX REPORTS

The reconstitution/reweighting reports consist of the selected bonds and their weightings at reconstitution/reweighting dates. The reports are published by the 15th of the month prior the effective month. The reconstitution is based upon average size of the bond issue and liquidity for the twelve-month period preceding the selection date and they are effective at 12 noon of the first Thursday of February, May, August and November. For the reweighting, the nominal amount in issue is taken to be the value at the end of the month, two months prior to the month in which the new re-weighting applies. They are effective on the Friday following the first Thursday of January, March, April, June, July, September, October, and December.

### 5.9 CILI

#### 5.9.1 Report Detail

Inflation-Linked Indices track the general levels of bonds whose returns are linked to the Consumer Price Index, or "CPI". The Composite Inflation-Linked Index is called the "CILI" and is split into three sub-indices to reflect bonds issued by Government, State Owned Enterprises and Corporates which will be called the "IGOV", "ISOE" and "ICORP" indices respectively.

The CILI is split into four sub-indices based on term to maturity forming the 1-3 year, 3-7 year, 7-12 year and 12+ year sub-indices.

#### 5.9.2 Report Field Descriptions

##### Worksheet 1: CILI Output

VALUATION DATE (t)	The date of the valuation, in the format DD-MM-YY.
SECTOR	Inflation-Linked Indices which track the general levels of bonds whose returns are linked to the Consumer Price Index
CLEAN PRICE INDEX	Price index which excludes accrued interest or coupons paid
ALL-IN-PRICE INDEX	Price index which is identical to the Clean Price index save for using the All-in-Price. This is used to benchmark portfolio performance which includes interest
INTEREST YIELD INDEX	Yield index associated with the price index which includes the coupons to be paid
TOTAL RETURN INDEX	Price index used to measure bond portfolio performance which includes accrued interest as well as historical index changes. The historical performance of the index is essentially embedded in the index level and the index does not jump during coupon payment events.
MODIFIED DURATION	The duration of a financial asset that consists of fixed cash flows, for example a bond, is the weighted average of the times until those fixed cash flows are received. The duration also measures the price sensitivity to yield, the rate of change

of price with respect to yield or the percentage change in price for a parallel shift in yields

#### CONVEXITY

A measure of the curvature in the relationship between bond prices and bond yields that demonstrates how the duration of a bond changes as the interest rate changes.

#### TOTAL RETURN MtD

Total return Month to Date

#### TOTAL RETURN YtD

Total return Year to Date

#### TOTAL RETURN YonY

Total return Year on Year

#### K FACTOR 'DATE'

A rebalancing factor on valuation date which caters for coupons/values vested in the sub sector/index

#### K FACTOR 'DATE + 1'

A rebalancing factor on valuation for the following day which caters for coupons/values vested in the sub sector/index

### 5.9.3 Record Layout

#### Excel Report(s)

<b>Report Name</b>	CILI<CCYYMMDD>.xls		
<b>Sheet Name</b>	CILI Output		
<b>Heading</b>			
	<b>Actual/&lt;Pattern&gt;/(Example)</b>	<b>Field Type</b>	<b>Cell</b>
<b>Report Title</b>	JSE ASSA Inflation Linked Bond Index	varchar(100)	F2
<b>Report Date</b>	<dd mmm yy>	datetime	C5
<b>Column headings</b>	(Sector)		B6-M6
<b>Detail</b>			
<b>Field Name</b>	<b>Field Type</b>	<b>Cells</b>	
Sector	varchar(100)	B7-B15	
Clean Price Index	float	C7-C15	
All-in-Price Index	float	D7-D15	
Interest Yield	float	E7-E15	
Total Return Index	float	F7-F15	
Modified Duration	float	G7-G15	
Convexity	float	H7-H15	
Total Return MtD	float	I7-I15	
Total Return YtD	float	J7-J15	
Total Return YonY	float	K7-K15	
K Factor <dd mmm>	float	L7-L15	
K Factor <dd mmm>	float	M7-M15	

## 5.10 CONSTITUENTS

NB: The IW and IWQ constituents follow the same formats and layouts as the CILI and ALBI.

### 5.10.1 Report Detail

A complete list of all constituents of the BEASSA total return indices reweighting published monthly and recons are quarterly.

### 5.10.2 Report Field Descriptions

BOND CODE	Short instrument code as assigned by the JSE
ISSUER	Any entity approved by the Exchange that has issued Debt Securities on the Exchange
COUPON	Interest rate payable by the issuer to investors
MATURITY	The date the instrument will redeem. (This is the date from which the maturity cash-flow will be discounted from)
WEIGHT	The weight is the nominal amount of the bonds that need to be held in the portfolio to balance to the index
COMMENTS	For future use (Column currently not populated/used)

### 5.10.3 Record Layout

#### Excel Report(s)

<b>Report Name</b>	IW<mmmCCYY>Reweighting(ALBI).xls		
<b>Sheet Name</b>	Notice <Q# CCYY>		
<b>Heading</b>			
	<b>Actual/&lt;Pattern&gt;/(Example)</b>	<b>Field Type</b>	<b>Cell</b>
<b>Report Heading</b>	(THE BOND EXCHANGE OF SOUTH AFRICA &)	varchar(100)	A1:A2
<b>Report Title</b>	(BEASSA BOND INDICES. INCORPORATING TOTAL RETURN INDICES.)	varchar(100)	A4:A5
<b>Report Description</b>	(Monthly re-weighting of the All Bond Index (ALBI) takes place on)	varchar(100)	A6:A7
<b>Sub-Headings</b>	(SECTOR 1 TO 3 YEARS)	varchar(50)	Variable
<b>Column headings</b>	(Bond Code)	varchar(20)	A9:H9
<b>Detail</b>			

Field Name	Field Type	Cells
Bond Code	varchar(20)	>=A12
Issuer	varchar(100)	>=B12
Coupon	float	>=D12
Maturity	datetime	>=E12
Weight	Integer	>=D12
Comments	char	>=H12:L12

## CSV Report(s)

Report Name	IW<mmmCCYY>Reweighting(ALBI).csv		
Report type	CSV		
Delimiter	comma ","		
Total rows	Varies		
Total columns	Fixed - 14		
Heading			
	Actual/<Pattern>/(Example)	Field Type	Row, Column
Report Heading	(THE BOND EXCHANGE OF SOUTH AFRICA &)	varchar(100)	1-2, 1
Report Title	(BEASSA BOND INDICES. INCORPORATING TOTAL RETURN INDICES.)	varchar(100)	4-5, 1
Repprt Description	(Monthly re-weighting of the All Bond Index (ALBI) takes place on)	varchar(100)	6-7, 1
Sub-Headings	(SECTOR 1 TO 3 YEARS)	varchar(50)	Variable
Column headings	(Bond Code)	varchar(20)	9, 1-11
Detail			
Field Name	Field Type	Column No.	
Bond Code	text	1	
Issuer	text	2	
Coupon	Date	4	
Maturity	Date	6	
Weight	numeric	7	
Comments	text	8-11	

### 5.10.1 Report Detail

A complete list of all constituents of the Composite Inflation –Linked Indices (CILI) Reweighting is published monthly by the JSE. The Recon is published quarterly

### 5.10.2 Report Field Descriptions

BOND CODE

Short instrument code as assigned by the JSE

ISSUER	Any entity approved by the Exchange that has issued Debt Securities on the Exchange
COUPON	Interest rate payable by the issuer to investors
MATURITY	The date the instrument will redeem. (This is the date from which the maturity cash-flow will be discounted from)
WEIGHT	The weight is the nominal amount of the bonds that need to be held in the portfolio to balance to the index
COMMENTS	For future use (Column currently not populated/used)

### 5.10.3 Record Layout

#### Excel Report(s)

<b>Report Name</b>	CIL<mmmCCYY>ReweightingCCYY.xls		
<b>Sheet Name</b>	Notice <Q# CCYY>		
<b>Heading</b>			
	<b>Actual/&lt;Pattern&gt;/(Example)</b>	<b>Field Type</b>	<b>Cell</b>
<b>Report Heading</b>	(THE JOHANNESBURG STOCK EXCHANGE &)	varchar(100)	A1:A2
<b>Report Title</b>	(JSE ASSA BOND INDICES. INCORPORATING TOTAL RETURN INDICES)	varchar(100)	A4:A5
<b>Report Description</b>	(Monthly re-weighting of the Composite Inflation Linked Bond Index (CIL) take place on)	varchar(100)	A6:A7
<b>Sub-Headings</b>	(SECTOR 1 TO 3 YEARS)	varchar(50)	Variable
<b>Column headings</b>	(Bond Code)	varchar(20)	A9:H9
<b>Detail</b>			
<b>Field Name</b>		<b>Field Type</b>	<b>Cells</b>
Bond Code		varchar(20)	>=A12
Issuer		varchar(100)	>=B12
Coupon		float	>=D12
Maturity		datetime	>=E12
Weight		Integer	>=D12
Comments		char	>=H12:N12

#### CSV Report(s)

<b>Report Name</b>	CIL<mmmCCYY>ReweightingCCYY.csv	
<b>Report type</b>	CSV	
<b>Delimiter</b>	comma ",",	
<b>Total rows</b>	Varies	

Total columns	Fixed - 14		
Heading			
	Actual/<Pattern>/(Example)	Field Type	Row, Column
Report Heading	(THE JOHANNESBURG STOCK EXCHANGE &)	varchar(100)	1-2, 1
Report Title	(JSE ASSA BOND INDICES. INCORPORATING TOTAL RETURN INDICES)	varchar(100)	4-5, 1
Repprt Description	(Monthly re-weighting of the Composite Inflation Linked Bond Index (CILI) take place on)	varchar(100)	6-7, 1
Sub-Headings	(SECTOR 1 TO 3 YEARS)	varchar(50)	Variable
Column headings	(Bond Code)	varchar(20)	9, 1-11
Detail			
Field Name	Field Type	Column No.	
Bond Code	text	1	
Issuer	text	2	
Coupon	Date	4	
Maturity	Date	6	
Weight	numeric	7	
Comments	text	8-13	

The CILIReconQ[Q]<CCYY> is produced quarterly and is the same format as the CILI Reweighting

## 5.11 DAILY TRI (ATTRIBUTION REPORT)

### 5.11.1 Report Detail

The JSE publishes this daily attribution file with all intermediate calculations for the Total Return Indices. The calculation of the indices requires a number of intermediate steps to get to the ultimate Index value from the individual prices. This report shows all intermediate calculations needed to calculate the daily index level as well as the individual bond performance figures.

### 5.11.2 Report Field Descriptions

#### Worksheet 1: DAILY TRI RANGE

PORTFOLIO	ALBI/GOVI/OTHI
INSTRUMENT CODE	Bond code (Short instrument code as assigned by the JSE)/Short code
VALUATION DATE	VALUATION DATE – Trade date (T+0), in the format DD-MM-YY
SETTLEMENT DATE	The date for which all instruments are valued. All cash flows are discounted back from maturity date to this date

MTM	Closing Yield
ALL IN PRICE	Price index which is identical to the Clean Price index save for using the All-in-Price. This is used to benchmark portfolio performance which includes interest
CLEAN PRICE	Price index which excludes accrued interest or coupons paid
ACCRUED INTEREST	The interest due to the buyer or seller. All based on nominal of 100 bonds
DURATION	Measures the price volatility and interest rate sensitivity of the instrument
MODIFIED DURATION	The duration of a financial asset that consists of fixed cash flows, for example a bond, is the weighted average of the times until those fixed cash flows are received. The duration also measures the price sensitivity to yield, the rate of change of price with respect to yield or the percentage change in price for a parallel shift in yields.
CONVEXITY	A measure of the sensitivity of the duration of a bond to changes in interest rates. The higher the convexity the more sensitive the bond price to the change in IR's.
MATURITY	The termination date of a bond
CPN	The first coupon payment date which is on or after valuation date
CPN1	First coupon payment date
CPN2	Second coupon payment date
CPN3	Third coupon payment date
CPN4	Fourth coupon payment date
BCD	Books close date corresponding to CPN
BCD1	First books close date
BCD2	Second books close date
BCD3	Third books close date
BCD4	Fourth books close date
LCD	The previous coupon payment date which is before CPN
NCD	The following coupon payment date which is after CPN

CUMEX	CU/EX Indicator
DAYS ACC	Number of days accrued since the last coupon payment date
BIT	The Bond Portion of the portfolio
ISSUE DATE	The date upon which a debt security is listed
DIT	The valuation date discount factor
HIT	The number of half-years over which the discounting is performed
KT	The proportionality constant (k-factor)
KTP	K-factor of the bond on the first day of its ex-period
NIT	The nominal amount of a bond
NITP	The nominal amount of the bond on the first day of its ex-period
NPIT	The nominal amount of the bond, effective on or before the next trading day
RIT	The value of the ex-coupon for re-investment on the last day of the ex-period.
VIT	The value of each bond's ex-coupon on any day in its ex-period
WIT	The Rand nominal amount issued for each bond
WITP	The next weightings
XIT	The ex-Coupon portion of the portfolio
COUPON FREQUENCY	Coupon frequency of a bond
COUPON RATE	Coupon Rate of a bond
QUARTERLY	Quarterly = 0-4:30 run, Quarterly = 1 – 12:00 run



### 5.11.3 Record Layout

#### Excel Report(s)

<b>Report Name</b>	Daily_TRI_<DDMMCCYY>.xls		
<b>Sheet Name</b>	Daily TRI		
<b>Heading</b>			
	<b>Actual/&lt;Pattern&gt;/(Example)</b>	<b>Field Type</b>	<b>Cell</b>
<b>Report Heading</b>	Daily TRI	varchar(100)	B3
<b>Column headings</b>	(Instrument Code)	varchar(50)	B5:AT5
<b>Detail</b>			
<b>Field Name</b>		<b>Field Type</b>	<b>Cells</b>
Portfolio		varchar(100)	>=B5
Instrument Code		varchar(50)	>=C5
Valuation Date		datetime	>=D5
Settlement Date		datetime	>=E5
MTM		float	>=F5
All In Price		float	>=G5
Clean Price		float	>=H5
Accrued Interest		float	>=I5
Duration		float	>=K5
Modified Duration		float	>=L5
Convexity		float	>=M5
Maturity		datetime	>=N5
CPN		datetime	>=O5
CPN1		datetime	>=P5
CPN2		datetime	>=Q5
CPN3		datetime	>=R5
CPN4		datetime	>=S5
BCD		datetime	>=T5
BCD1		datetime	>=U5
BCD2		datetime	>=V5
BCD3		datetime	>=W5
BCD4		datetime	>=X5
LCD		datetime	>=Y5
NCD		datetime	>=Z5
CUMEX		varchar(50)	>=AA5
Days Acc		integer	>=AB5
Bit		float	>=AC5
Issue Date		datetime	>=AD5
Dit		float	>=AE5
Hit		float	>=AF5
Kt		float	>=AG5
Ktp		float	>=AH5
Nit		float	>=AI5
Nitp		float	>=AJ5
Npit		float	>=AK5
Rit		float	>=AL5
Vit		float	>=AM5

Wit	float	>=AN5
Witp	float	>=AO5
Xit	float	>=AP5
Coupon Frequency	integer	>=AR5
Coupon Rate	float	>=AS5
Quarterly	integer	>=AT5

## CSV Report(s)

Report Name	Daily_TRI_<DDMMCCYY>.csv	
Report type	CSV	
Delimiter	comma ", "	
Total rows	Varies	
Total columns	Fixed - 43	
Detail		
Field Name	Field Type	Column No.
Portfolio	text	1
Instrument Code	text	2
Valuation Date	date	3
Settlement Date	date	4
MTM	numeric	5
All In Price	numeric	6
Clean Price	numeric	7
Accrued Interest	numeric	8
Duration	numeric	9
Modified Duration	numeric	10
Convexity	numeric	11
Maturity	date	12
CPN	date	13
CPN1	date	14
CPN2	date	15
CPN3	date	16
CPN4	date	17
BCD	date	18
BCD1	date	19
BCD2	date	20
BCD3	date	21
BCD4	date	22
LCD	date	23
NCD	date	24
CUMEX	text	25
Days Acc	numeric	26
Bit	numeric	27
Issue Date	date	28
Dit	numeric	29
Hit	numeric	30
Kt	numeric	31
Ktp	numeric	32

Nit	numeric	33
Nitp	numeric	34
Npit	numeric	35
Rit	numeric	36
Vit	numeric	37
Wit	numeric	38
Witp	numeric	39
Xit	numeric	40
Coupon Frequency	numeric	41
Coupon Rate	numeric	42
Quarterly	numeric	43

## 5.12 TRI (TOTAL RETURN INDEX)

### 5.12.1 Report Detail

The total return indices are calculated daily based on the constituents of the indices as well as each individual instruments daily performance. This report shows the clean and total return index values for the given day along with the relevant Greeks (Modified Duration, Convexity). Periodic return numbers (Month to date and Year to date) are also included in the report.

### 5.12.2 Report Field Descriptions

#### **Worksheet 1:** **TRI"CCYYMMDD"**

VALUATION DATE	VALUATION DATE - The date of the valuation, in the format DD-MM-YY
SECTOR	The sub index short code. For example ALBI, GOVI, OTHI, or as ALBI Term splits
CLEAN PRICE INDEX	Price index which excludes accrued interest
INTEREST YIELD	Interest component (accrued interest due to the clean price index). Refer to clean price index methodology.
TOTAL RETURN INDEX	Price index used to measure bond portfolio performance which includes accrued interest as well as historical index changes. The historical performance of the index is essentially embedded in the index level and the index does not jump during coupon payment events.
TRI AVERAGE YIELD	The average yield of the sub index/sector of all constituents
MODIFIED DURATION	The duration of a financial asset that consists of fixed cash flows, for example a bond, is the weighted average of the times until those fixed cash flows is received. The duration also measures the price sensitivity to yield, the rate of change of price with respect to yield or the percentage change in price for a parallel shift in yields.
CONVEXITY	A measure of the sensitivity of the duration of a bond to changes in interest rates. The higher the convexity the more sensitive the bond price to the change in IR's.
TOTAL RETURN MtD	The return of the sub index/sector for the month to date as based on the TRI
TOTAL RETURN YtD	The return of the sub index/sector for the year to date as based on the TRI
TOTAL RETURN YonY	The return of the sub index/sector for the year on year to date as based on the TRI

K FACTOR 'DATE'

A rebalancing factor on valuation date which caters for coupons/values vested in the sub sector/index

K FACTOR 'DATE + 1'

A rebalancing factor on valuation for the following day which caters for coupons/values vested in the sub sector/index

### 5.12.1 Record Layout

#### CSV Report(s)

Report Name	TRI<CCYYMMDD>.csv		
Report type	CSV		
Delimiter	comma ",",		
Total rows	Fixed - 13		
Total columns	Fixed - 13		
Heading			
	Actual/<Pattern>/(Example)	Field Type	Row, Column
Report Title	BEASSA Total Return Indices	varchar(100)	1, 6
Trade date	<dd-mmm-yy>	datetime	4, 3
Settlement date	N/A	N/A	N/A
Column headings	(Bond Code)		5, (2-13)
Detail			
Field Name		Field Type	Column No.
Sector		varchar(20)	2
Clean Price Index		float	3
Interest Yield		float	4
Total Return Index		float	5
TRI Average Yield		float	6
Modified Duration		float	7
Convexity		float	8
Total Return MtD		float	9
Total Return YtD		float	10
Total Return YonY		float	11
K Factor <dd mmm>		float	12
K Factor <dd mmm>		float	13

## 5.13 BOND DATA

### 5.13.1 Report Detail

Bond Database is a reference file, which provides specific instrument information of all listed instruments in the Bond Market. The bonds listed in this report are the primary driver in the SA Capital Market.

**N.B. highlighted Fields will not be populated with data in this file**

### 5.13.2 Report Field Descriptions

#### Worksheet 1: BondDataCCYYMMDD

BOND CODE	Short instrument code as requested by the Issuer
PRICING CLASS CODE	Financial Instrument type
ISIN NO	International Securities Identification Number (ISIN) uniquely identifies a security
ISSUER	Any entity approved by the Exchange that has issued Debt Securities on the Exchange
ISSUER CLASS	The sector/industry the issuer falls under
ISSUE COUNTRY	Country of residence of the Issuer
CURRENCY	Currency that Instrument is listed in
AUTHORISED AMOUNT	The amount which the Board of Directors/ Company has approved for issue in respect of the Debt Security concerned
ISSUED AMOUNT	The nominal amount of bonds issued by the issuer and placed in the market
ALL IN PRICE	The price of a coupon bond including accrued interest
CLEAN PRICE	The price of a coupon bond not including any accrued interest
MARKET CAP AIP	All in price / 100 * Nominal in issue (Cash value of bonds in issue)
MARKET CAP CLEAN	All in price / 100 * Nominal in issue (Cash value of bonds in issue, excluding interest)

TOTAL SPOT NOMINAL TRADED  
FOR MONTH EXCLUDING REPOS

In a repo agreement, the borrower agrees to sell immediately a security to a lender and also agrees to buy the same security from the lender at a fixed price at some later date

TOTAL SPOT CLEAN  
CONSIDERATION FOR 'MONTH'  
EXCLUDING REPOS

The cash value of turnover excluding interest for the month

ISSUE DATE

The date upon which a Debt Security is Listed

COUPON RATE %

The interest rate of a bond / fixed income security

COUPON FREQUENCY

The number of interest payments made annually

COUPON RATE INDICATOR

Whether the bond pays a fixed or variable coupon

FLOAT RATE FIXED

this field is used to indicate the basis points / spreads for floating rate notes

FLOAT RATE VARIABLE

This field is used to indicate whether the variable notes is linked to 3/6/12m JIBAR or another index.

COUPON FLOOR

In the event of a floating rate note the coupon could be limited on the downside should the reference yield (JIBAR) dip below a certain level.

COUPON CAP

In the event of a floating rate note the coupon could be limited on the upside should the reference yield (JIBAR) rise above a certain level.

FIRST INTEREST DATE

The first interest payment date stipulated by the issuer, as the first period that the debt interest pays coupon

FIRST BOOK CLOSE DATE

The period stipulated by an Issuer as being the first period that the Register closes

BROKEN FIRST COUPON

For long / short stub instrument. Indicates that the first coupon will be for a period shorter or longer than the interest periods indicated for the particular debt instrument.

MATURITY DATE

The Date the principal amount is paid back and the bond terminates.

CALLABLE FEATURES

For callable instruments

EARLY REDEMPTION

This field indicates that the issuer might redeem the instrument before the final redemption date. It is mostly applicable to callable bonds.

PRICING REDEMPTION DATE	The date on which the bond matures. For callable bonds the earlier redemption date will be shown in this field and the final redemption date in the Maturity Date field.
SPLIT MATURITY	The maturity date for bonds that has split into new series
SPLIT MATURITY DATE 1	The maturity date for bonds that has split into new series
SPLIT MATURITY DATE 2	The maturity date for bonds that has split into new series
TRADE TYPE	Whether the bond is trading at price, yield or inflation.
INTEREST DATE 1-12	Dates on which a bond pays a coupon
BOOK CLOSE DATE 1-12	The period or periods stipulated by an Issuer as being the period or periods during which the Register in respect of its Debt Securities is closed for purposes of giving effect to transfers of the Debt Securities.
GUARANTEE TYPE	Guarantees in place at time of issue
STATUS	Listed, Redeemed, Matured
RATING FITCH	For future use (Column currently not populated/used)
RATING SP	For future use (Column currently not populated/used)
RATING MOODY	For future use (Column currently not populated/used)
CA RATINGS	Data is no longer captured, however field is populated for older bonds.
MARKET MAKER	For future use (Column currently not populated/used)
INTEREST START DATE	The date from which interest is accrued for the first coupon payment.
DATE CONVENTION	Indicate how payments / maturity will be treated if it should fall on a non-business day.
BASE CPI	Provides the applicable Base CPI
BOND ETP	Flag that denotes whether the instrument is also traded on the Bond ETP platform

### 5.13.3 Record Layout

#### Excel Report(s)

Report Name	Latest.xls		
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<b>Sheet Name</b>	BondData		
<b>Heading</b>			
	<b>Actual/&lt;Pattern&gt;/(Example)</b>	<b>Field Type</b>	<b>Cell</b>
<b>Report Title</b>	Bond Data	varchar(100)	A1-B1
<b>Trade Date</b>	<yy mmm dd>	datetime	A2-B2
<b>Detail</b>			
<b>Field Name</b>	<b>Field Type</b>	<b>Cells</b>	
Bond Code	[varchar](20)	A4	
Pricing Class Code	[varchar](10)	B4	
ISIN No	[varchar](20)	C	
Issuer	[varchar](100)	D	
Issuer Class	[varchar](10)	E	
Issuer Country	[varchar](100)	F	
Currency	[varchar](50)	G	
Authorised Amount	[money]	H	
Issued Amount	[money]	I	
All in Price	[float]	J	
Clean Price	[float]	K	
Market Cap AIP	[float]	L	
Market Cap Clean	[float]	M	
Total Spot Nominal Traded For [Month] Excluding Repos	[float]	N	
Total Spot Clean Consideration For [Month] Excluding Repos	[float]	O	
Issue Date	[datetime]	P	
Coupon Rate %	[float]	Q	
Coupon Frequency	[tinyint]	R	
Coupon Rate Indicator	[varchar](50)	S	
Float Rate Fixed	[varchar](50)	T	
Float Rate Variable	[varchar](100)	U	
Coupon Floor	[varchar](50)	V	
Coupon Cap	[varchar](50)	W	
First Interest Date	[datetime]	X	
First Book Close Date	[datetime]	Y	
Broken First Coupon	[bit]	Z	
Maturity Date	[datetime]	AA	
Callable Features	[varchar](500)	AB	
Early Redemption	[bit]	AC	
Pricing Redemption Date	[datetime]	AD	
Split Maturity	[bit]	AE	

Split Maturity Date 1	[datetime]	AF
Split Maturity Date 2	[datetime]	AG
Trade Type	[varchar](50)	AH
Interest Date 1	[datetime]	AI
Interest Date 2	[datetime]	AJ
Interest Date 3	[datetime]	AK
Interest Date 4	[datetime]	AL
Interest Date 5	[datetime]	AM
Interest Date 6	[datetime]	AN
Interest Date 7	[datetime]	AO
Interest Date 8	[datetime]	AP
Interest Date 9	[datetime]	AQ
Interest Date 10	[datetime]	AR
Interest Date 11	[datetime]	AS
Interest Date 12	[datetime]	AT
Book Close Date 1	[datetime]	AU
Book Close Date 2	[datetime]	AV
Book Close Date 3	[datetime]	AW
Book Close Date 4	[datetime]	AX
Book Close Date 5	[datetime]	AY
Book Close Date 6	[datetime]	AZ
Book Close Date 7	[datetime]	BA
Book Close Date 8	[datetime]	BB
Book Close Date 9	[datetime]	BC
Book Close Date 10	[datetime]	BD
Book Close Date 11	[datetime]	BE
Book Close Date 12	[datetime]	BF
Guarantee Type	[varchar](200)	BG
Status	[varchar](50)	BH
Rating Fitch	[varchar](100)	BI
Rating SP	[varchar](100)	BJ
Rating Moody	[varchar](100)	BK
CA Ratings	[varchar](100)	BL
Market Maker	[varchar](250)	BM
General Info	[varchar](500)	BN
Interest Start Date		BO
Date Convention		BP
Base CPI	Decimal(3,15)	BQ
Bond ETP	[varchar](1)	BR



## CSV Report(s)

<b>Report Name</b>	BondData<CCYYMMDD>.csv		
<b>Sheet Name</b>	BondData		
<b>Heading</b>			
	<b>Actual/&lt;Pattern&gt;/(Example)</b>	<b>Field Type</b>	<b>Cell</b>
<b>Report Title</b>	Bond Data	varchar(100)	A1-B1
<b>Trade Date</b>	<yy mmm dd>	datetime	A2-B2
<b>Detail</b>			
<b>Field Name</b>		<b>Field Type</b>	<b>Cells</b>
Bond Code		[varchar](20)	A4
Pricing Class Code		[varchar](10)	B4
ISIN No		[varchar](20)	C
Issuer		[varchar](100)	D
Issuer Class		[varchar](10)	E
Issuer Country		[varchar](100)	F
Currency		[varchar](50)	G
Authored Amount		[money]	H
Issued Amount		[money]	I
All in Price		[float]	J
Clean Price		[float]	K
Market Cap AIP		[float]	L
Market Cap Clean		[float]	M
Total Spot Nominal Traded For [Month] Excluding Repo		[float]	N
Total Spot Clean Consideration For [Month] Excluding Repos		[float]	O
Issue Date		[datetime]	P
Coupon Rate %		[float]	Q
Coupon Frequency		[tinyint]	R
Coupon Rate Indicator		[varchar](50)	S
Float Rate Fixed		[varchar](50)	T
Float Rate Variable		[varchar](100)	U
Coupon Floor		[varchar](50)	V
Coupon Cap		[varchar](50)	W
First Interest Date		[datetime]	X
First Book Close Date		[datetime]	Y
Broken First Coupon		[bit]	Z
Maturity Date		[datetime]	AA

Callable Features	[varchar](500)	AB
Early Redemption	[bit]	AC
Pricing Redemption Date	[datetime]	AD
Split Maturity	[bit]	AE
Split Maturity Date 1	[datetime]	AF
Split Maturity Date 2	[datetime]	AG
Trade Type	[varchar](50)	AH
Interest Date 1	[datetime]	AI
Interest Date 2	[datetime]	AJ
Interest Date 3	[datetime]	AK
Interest Date 4	[datetime]	AL
Interest Date 5	[datetime]	AM
Interest Date 6	[datetime]	AN
Interest Date 7	[datetime]	AO
Interest Date 8	[datetime]	AP
Interest Date 9	[datetime]	AQ
Interest Date 10	[datetime]	AR
Interest Date 11	[datetime]	AS
Interest Date 12	[datetime]	AT
Book Close Date 1	[datetime]	AU
Book Close Date 2	[datetime]	AV
Book Close Date 3	[datetime]	AW
Book Close Date 4	[datetime]	AX
Book Close Date 5	[datetime]	AY
Book Close Date 6	[datetime]	AZ
Book Close Date 7	[datetime]	BA
Book Close Date 8	[datetime]	BB
Book Close Date 9	[datetime]	BC
Book Close Date 10	[datetime]	BD
Book Close Date 11	[datetime]	BE
Book Close Date 12	[datetime]	BF
Guarantee Type	[varchar](200)	BG
Status	[varchar](50)	BH
Rating Fitch	[varchar](100)	BI
Rating SP	[varchar](100)	BJ
Rating Moody	[varchar](100)	BK
CA Ratings	[varchar](100)	BL
Market Maker	[varchar](250)	BM
General Info	[varchar](500)	BN
Interest Start Date		BO
Date Convention		BP
Base CPI	Decimal(3,15)	BQ
Bond ETP	[varchar](1)	BR

## TURNOVER STATS REPORTS

The Trade Detail report provides all the reported trades for the day. It excludes any trades which are reported and cancelled on the same day, but includes any back dated trades reported on the day.

This report will be available daily, at End of Day; however, can be requested for a period. Where the report is run for a period longer than one day (i.e. weekly or monthly), it will include all trades which contribute to the statistics of that period, regardless of when they were reported.

The reports will be produced in both XLS and CSV format.

The current Turnover Reports are being replaced by three “new” reports (see below) effective 3<sup>rd</sup> February 2014:

### 5.14 TRADE DETAIL

#### 5.14.1 Report Detail

This report provides all the reported trades for the day. It excludes any trade which is reported and cancelled on the same day, but includes any back dated trades reported on the day.

#### 5.14.2 Report Field Descriptions

Statistic Date	Date on which trade will be aggregated into statistics
Trade Date	Date on which trade was reported to the system
Trade Time	Time at which matching criteria for both Buy and Sell legs is satisfied
Instrument	Bond Code
Yield	Yield at which the trade was made. Except where the instrument is price traded, in which case it shows the price
Nominal	Nominal amount of trade. Can be negative for backdated Equal and Opposites
All in Price	Price, or derived price at which the trade was made
Consideration	ZAR value of trade. Can be negative
Carry Rate	Underlying rate at which Repo trade was booked. Only filled in for Repo 1 and Repo 2 trade types

Trade Type	Standard Trade Standard Trade (Spot) Repo 1 Repo 2 Structured Deal (SD) Free of Value (FOV) Option Exercised (OX) Other Backdated E&O (Standard Trade) Backdated E&O (Standard Trade-Spot) Backdated E&O (Repo1 or Repo2) Backdated E&O (FOV) Backdated E&O (Structured deal) Backdated E&O (OX)
Buy Party	Foreign Client, Member, Local Client
Sell Party	Foreign Client, Member, Local Client
Settlement	Date on which settlement is scheduled to occur
Period	Settlement period of trade (i.e. t+0 for same day)
Companion	Represents the reference instrument over which the bond was traded. Each listed instrument is available as a companion bond as well as JIBAR. Should an instrument be a floating rate note the JIBAR value should be used as a companion bond.
Spread	Represents the traded spread value over the companion bonds YTM. In the case of a floating rate note the spread represent the traded spread above JIBAR. In both cases users will still be required to capture the spread and the yield values. All calculations will be based off of the yield value and will not consider the spread value.
Clean Price	Represents capital value of the bond price without regard for the interest accrued or coupon paid

### 5.14.3 Record Layout

#### Excel Report(s)

<b>Report Name</b>	TradeDetail_Daily<CCYYMMDD>.xls		
<b>Sheet Name</b>	Trade Detail		
Heading			
	Actual/<Pattern>/(Example)	Field Type	Cell
<b>Report Title</b>	Trade Detail	Text	A11
<b>Date Range</b>	Trade Date	Date	B12
<b>Date From</b>	<CCYY/MM/DD>	Date	B13
<b>Date To</b>	<CCYY/MM/DD>	Date	B14
<b>Statistic Date</b>	None	Date	B15
<b>Filters</b>	None		B16

<b>Generated</b>	<CCYYMMDD> <HH:MM:SS>	Date & Time	B14
<b>Column headings</b>	(Statistics Date)	Text	A19-Q19
Detail			
Field Name	Field Type		Cells
Statistic Date	date		>=A20
Trade Date	date		>=B20
Trade Time	time		>=C20
Instrument	varchar(12)		>=D20
Yield	float		>=E20
Nominal	Integer		>=F20
All in price	float		>=G20
Consideration	float		>=H20
Carry Rate	float		>=I20
Trade Type	varchar(50)		>=J20
Buy Party	varchar(50)		>=K20
Sell Party	varchar(50)		>=L20
Settlement	Date		>=M20
Period	Varchar(50)		>=N20
Companion	Varchar(30)		>=O20
Spread	Decimal(18,9)		>=P20
Clean Price	Decimal (18.9)		>=Q20

## CSV Report(s)

Report Name	TradeDetail_Daily<CCYYMMDD>.csv		
Report type	CSV		
Delimiter	comma ",",		
Total rows	Varies		
Total columns	Fixed – 16		
Heading			
	Actual/<Pattern>/(Example)	Field Type	Cell
Report Title	Trade Detail	Text	A1
Date Range	Trade Date	Date	B2
Date From	<CCYY/MM/DD>	Date	B3
Date To	<CCYY/MM/DD>	Date	B4
Statistic Date	None	Date	B5
Filters	None		B6
Generated	<CCYYMMDD> <HH:MM:SS>	Date & Time	B7
Column headings	(Statistics Date)	Text	A9-Q9
Detail			
Field Name		Field Type	Cells
Statistic Date		date	>=A9
Trade Date		date	>=B9
Trade Time		time	>=C9
Instrument		varchar(12)	>=D9
Yield		float	>=E9



Nominal	Integer	>=F9
All in price	float	>=G9
Consideration	float	>=H9
Carry Rate	float	>=I19
Trade Type	varchar(50)	>=J9
Buy Party	varchar(50)	>=K9
Sell Party	varchar(50)	>=L9
Settlement	Date	>=M9
Period	Varchar(50)	>=N9
Companion	Varchar(30)	>=O9
Spread	Decimal(18,9)	>=P9
Clean Price	Decimal (18.9)	>=Q9

## 5.15 INSTRUMENT DETAIL

### 5.15.1 Report Detail

This Report will be provided end of day for all trades reported on that day -**note** that this may affect statistics on previous days due to backdated trades. As such, there may be multiple rows for a particular instrument, each for different statistics dates. Where the report is run for a period longer than one day (i.e. weekly or monthly), it will include all trades which contribute to the statistics of that period, regardless of when they were reported.

Frequency of the report: Daily, Weekly, Monthly and Year-to-date (showing the aggregate statistics for that particular period).

### 5.15.2 Report Field Descriptions

#### **Worksheet 1: INSTRUMENT DETAIL**

STANDARD TURNOVER (SPOT ONLY)	Statistics per trade type Header
STANDARD TURNOVER (INCLUDES SPOT )	Statistics per trade type Header
REPO 1 TURNOVER	Statistics per trade type Header
REPO 2 TURNOVER	Statistics per trade type Header
TOTAL TURNOVER	Statistics per trade type Header
STRUCTURED DEALS (SD)	Statistics per trade type Header
FREE OF VALUE (FOV)	Statistics per trade type Header
OPTION EXERCISE (OX)	Statistics per trade type Header
OTHER	Statistics per trade type Header
STATISTIC DATE	Date on which trade will be aggregated into statistics. Left blank when report is generated at a Statistic Date: Summary level
INSTRUMENT	Bond Code
DEALS	Number of Trades. Can be negative for backdated Equal and Opposites
NOMINAL	Nominal amount of trade. Can be negative for backdated Equal and Opposites
CONSIDERATION	ZAR value of trade. Can be negative for backdated Equal and Opposites
DEALS	Number of Trades. . Can be negative for backdated Equal and Opposites

NOMINAL	Nominal amount of trade. Can be negative for backdated Equal and Opposites
CONSIDERATION	ZAR value of trade. Can be negative
DEALS	Number of Trades for backdated Equal and Opposites
NOMINAL	Nominal amount of trade. Can be negative for backdated Equal and Opposites
CONSIDERATION	ZAR value of trade. Can be negative for backdated Equal and Opposites
DEALS	Number of Trades. Can be negative for backdated Equal and Opposites
NOMINAL	Nominal amount of trade. Can be negative for backdated Equal and Opposites
CONSIDERATION	ZAR value of trade. Can be negative for backdated Equal and Opposites
DEALS	Number of Trades. Can be negative for backdated Equal and Opposites
NOMINAL	Nominal amount of trade. Can be negative for backdated Equal and Opposites
CONSIDERATION	ZAR value of trade. Can be negative for backdated Equal and Opposites
DEALS	Number of Trades. Can be negative for backdated Equal and Opposites
NOMINAL	Nominal amount of trade. Can be negative for backdated Equal and Opposites
CONSIDERATION	ZAR value of trade. Can be negative for backdated Equal and Opposites
DEALS	Number of Trades. Can be negative for backdated Equal and Opposites
NOMINAL	Nominal amount of trade. Can be negative for backdated Equal and Opposites
CONSIDERATION	ZAR value of trade. Can be negative for backdated Equal and Opposites
DEALS	Number of Trades. . Can be negative for backdated Equal and Opposites

NOMINAL	Nominal amount of trade. Can be negative for backdated Equal and Opposites
CONSIDERATION	ZAR value of trade. Can be negative for backdated Equal and Opposites
DEALS	Number of Trades Can be negative for backdated Equal and Opposites
NOMINAL	Nominal amount of trade. Can be negative for backdated Equal and Opposites
CONSIDERATION	ZAR value of trade. Can be negative

### 5.15.3 Record Layout

#### Excel Report(s)

<b>Report Name</b>	InstrumentDetail_Daily<CCYYMMDD>.xls		
<b>Sheet Name</b>	Instrument Detail		
<b>Heading</b>			
	<b>Actual/&lt;Pattern&gt;/(Example)</b>	<b>Field Type</b>	<b>Cell</b>
<b>Report Title</b>	Instrument Detail	Text	A11
<b>Date Range</b>	Trade Date	Date	B12
<b>Date From</b>	< CCYY/MM/DD>	Date	B13
<b>Date To</b>	< CCYY/MM/DD>	Date	B14
<b>Statistic Date</b>	Detail/ Summary	Date	B15
<b>Filters</b>	None		B16
<b>Generated</b>	<CCYYMMDD> <HH:MM:SS>	Date & Time	B17
<b>Top Header Row</b>	(Statistics Date)	varchar(100)	Row 19
<b>Bottom Header Row</b>		varchar(100)	Row 20
<b>Data Starting Row</b>			Row 21
<b>Totals</b>	<b>Sum Total per column</b>		Last Row
<b>Detail</b>			
<b>Field Name</b>		<b>Field Type</b>	<b>Cells</b>
Standard Turnover (Spot Only)		varchar(100)	C-D-E 20
Standard Turnover (includes Spot )		varchar(100)	F-G-H 20
Repo 1 Turnover		varchar(100)	I-J-K 20
Repo 2 Turnover		varchar(100)	L-M-N 20
Total Turnover		varchar(100)	O-P-Q 20
Structured Deals (SD)		varchar(100)	R-S-T 20
Free of Value (FOV)		varchar(100)	U-V-W 20
Option Exercise (OX)		varchar(100)	X-Y-Z 20
Other		varchar(100)	AA-AB-AC 20
Statistic Date		Date	>=A 21

Instrument	Varchar(12)	>=B 21
Deals	Integer	>=C 21
Nominal	Integer	>=D 21
Consideration	Float	>=E 21
Deals	Integer	>=F 21
Nominal	Integer	>=G 21
Consideration	Float	>=H 21
Deals	Integer	>=I 21
Nominal	Integer	>=J 21
Consideration	Float	>=K 21
Deals	Integer	>=L 21
Nominal	Integer	>=M 21
Consideration	Float	>=N 21
Deals	Integer	>=O 21
Nominal	Integer	>=P 21
Consideration	Float	>=Q 21
Deals	Integer	>=R 21
Nominal	Integer	>=S 21
Consideration	Float	>=T 21
Deals	Integer	>=U 21
Nominal	Integer	>=V 21
Consideration	Float	>=W 21
Deals	Integer	>=X 21
Nominal	Integer	>=Y 21
Consideration	Float	>=Z 21
Deals	Integer	>=AA 21
Nominal	Integer	>=AB 21
Consideration	Float	>=AC 21

### CSV Report(s)

Report Name	InstrumentDetail_Daily<CCYYMMDD>.csv		
Report type	CSV		
Delimiter	comma ",",		
Total rows	Varies		
Total columns	Fixed - 14		
Heading			
	Actual/<Pattern>/(Example)	Field Type	Cell
Report Title	Instrument Detail	Text	A1
Date Range	Trade Date	Date	B2
Date From	< CCYY/MM/DD>	Date	B3
Date To	< CCYY/MM/DD>	Date	B94
Statistic Date	Detail/ Summary	Date	B5
Filters	None		B6
Generated	<CCYYMMDD> <HH:MM:SS>	Date & Time	B7
Top Header Row	(Statistics Date)	varchar(100)	Row 9

<b>Bottom Header Row</b>		varchar(100)	Row 10
<b>Data Starting Row</b>			Row 11
<b>Totals</b>	<b>Sum Total per column</b>		Last Row
<b>Detail</b>			
<b>Field Name</b>	<b>Field Type</b>	<b>Cells</b>	
Standard Turnover (Spot Only)	varchar(100)	C-9	
Standard Turnover (includes Spot )	varchar(100)	F-9	
Repo 1 Turnover	varchar(100)	I-9	
Repo 2 Turnover	varchar(100)	L-9	
Total Turnover	varchar(100)	O-9	
Structured Deals (SD)	varchar(100)	R-9	
Free of Value (FOV)	varchar(100)	U-9	
Option Exercise (OX)	varchar(100)	X-9	
Other	varchar(100)	AA-9	
Statistic Date	Date	>=A 11	
Instrument	Varchar(12)	>=B 11	
Deals	Integer	>=C 11	
Nominal	Integer	>=D 11	
Consideration	Float	>=E 11	
Deals	Integer	>=F 11	
Nominal	Integer	>=G 11	
Consideration	Float	>=H 11	
Deals	Integer	>=I 11	
Nominal	Integer	>=J 11	
Consideration	Float	>=K 11	
Deals	Integer	>=L 11	
Nominal	Integer	>=M 11	
Consideration	Float	>=N 11	
Deals	Integer	>=O 11	
Nominal	Integer	>=P 11	
Consideration	Float	>=Q 11	
Deals	Integer	>=R 11	
Nominal	Integer	>=S 11	
Consideration	Float	>=T 11	
Deals	Integer	>=U 11	
Nominal	Integer	>=V 11	
Consideration	Float	>=W 11	
Deals	Integer	>=X 11	
Nominal	Integer	>=Y 11	
Consideration	Float	>=Z 11	
Deals	Integer	>=AA 11	
Nominal	Integer	>=AB 11	
Consideration	Float	>=AC 11	

## 5.16 MEMBER/CLIENT POSITION

### 5.16.1 Report Detail

This report provides detail at a trade leg level per trade category (i.e. Buy and Sell shown separately) and shows the split between member/local client and foreign client transactions. The report replaces the Member Client Position tab in the Detailed Turnover Report. It contains two tabs-Member\_ Client Overall and Member \_ Client Instruments.

Frequency of Report: Daily, Weekly, Monthly and Year-to-date (showing the aggregate statistics for that particular period).

### 5.16.2 Report Field Descriptions

This report consists of two worksheets – ‘Member Client Overall’ and ‘Member Client Instruments’.

#### Worksheet 1: Member Client Overall

STATISTICS DATE	Date on which trade will be aggregated into statistics. Left blank when report is generated at a Statistic Date: Summary level
-----------------	--

MEMBER/CLIENT	Foreign Client, Member, Local Client
---------------	--------------------------------------

PARTY	Buy or Sell
-------	-------------

#### STANDARD TURNOVER (SPOT ONLY)

DEALS	Number of Trades. Can be negative for backdated Equal and Opposites
-------	--

NOMINAL	Nominal amount of trade. Can be negative for backdated Equal and Opposites
---------	---

CONSIDERATION	ZAR value of trade. Can be negative for backdated Equal and Opposites
---------------	--

#### STANDARD TURNOVER (Incl SPOT)

DEALS	Number of Trades. Can be negative for backdated Equal and Opposites
-------	--

NOMINAL	Nominal amount of trade. Can be negative for backdated Equal and Opposites
---------	---

CONSIDERATION	ZAR value of trade. Can be negative for backdated Equal and Opposites
---------------	--

#### REPO 1 TURNOVER

DEALS	Number of Trades. Can be negative for backdated Equal and Opposites
-------	--

NOMINAL	Nominal amount of trade. Can be negative for backdated Equal and Opposites
---------	---

CONSIDERATION	ZAR value of trade. Can be negative for backdated Equal and Opposites
<b><u>REPO 2 TURNOVER</u></b>	
DEALS	Number of Trades. Can be negative for backdated Equal and Opposites
NOMINAL	Nominal amount of trade. Can be negative for backdated Equal and Opposites
CONSIDERATION	ZAR value of trade. Can be negative for backdated Equal and Opposites
<b><u>TOTAL TURNOVER</u></b>	
DEALS	Number of Trades. Can be negative for backdated Equal and Opposites
NOMINAL	Nominal amount of trade. Can be negative for backdated Equal and Opposites
CONSIDERATION	ZAR value of trade. Can be negative for backdated Equal and Opposites
<b><u>STRUCTURED DEALS</u></b>	
DEALS	Number of Trades. Can be negative for backdated Equal and Opposites
NOMINAL	Nominal amount of trade. Can be negative for backdated Equal and Opposites
CONSIDERATION	ZAR value of trade. Can be negative for backdated Equal and Opposites
<b><u>FREE OF VALUE</u></b>	
DEALS	Number of Trades. Can be negative for backdated Equal and Opposites
NOMINAL	Nominal amount of trade. Can be negative for backdated Equal and Opposites
CONSIDERATION	ZAR value of trade. Can be negative for backdated Equal and Opposites
<b><u>OPTION EXERCISE</u></b>	
DEALS	Number of Trades. Can be negative for backdated Equal and Opposites
NOMINAL	Nominal amount of trade. Can be negative for backdated Equal and Opposites
CONSIDERATION	ZAR value of trade. Can be negative for backdated Equal and Opposites
<b><u>OTHER</u></b>	
OT_DEALS	(Other Trades) Number of Trades. Can be negative for backdated Equal and Opposites



OT\_QUANTITY

(Other Trades) Nominal traded. Can be negative for backdated Equal and Opposites

OT\_CONSIDERATION

(Other Trades) ZAR value of trade. Can be negative for backdated Equal and Opposites

### 5.16.3 Record Layout

#### Excel Report(s)

#### Worksheet 1: Member\_Client Position Overall

Report Name	MemberClientPosDetail_Daily<CCYYMMDD>.xls		
Sheet Name	Member_Client Overall		
Heading			
	Actual/<Pattern>/(Example)	Field Type	Cell
Report Title	Member/Client Pos: Summary	Text	A11
Date Range	Trade Date	Date	B12
Date From	<CCYYMMDD>	Date	B13
Date To	<CCYYMMDD>	Date	B14
Statistic Date	None	Date	B15
Filters	None		B16
Generated	<CCYYMMDD> <HH:MM:SS>	Date & Time	B17
Top Header Row		Text	Row 19
Bottom Header Row		Text	Row 20
Data starting row			Row 21
Detail			
Field Name		Field Type	Cells
Standard Turnover (Spot Only)		varchar(100)	D-E-F19
Standard Turnover (includes Spot)		varchar(100)	G-H-I19
Repo 1 Turnover		varchar(100)	J-K-L19
Repo 2 Turnover		varchar(100)	M-N-O19
Total Turnover		varchar(100)	P-Q-R19
Structured Deals		varchar(100)	S-T-U19
Free of Value		varchar(100)	V-W-X19
Option Exercise		varchar(100)	Y-Z-AA19
Other		varchar(100)	AB-AC-AD19
Statistic Date		Date	A20
Member / Client		Text	B20
Foreign Client		Text	B21
Foreign Client		Text	B22
Foreign Client		Text	B23
Blank row			Row 24
Local Client		Text	B25
Local Client		Text	B26
Local Client		Text	B27
Blank row			Row 28
Member		Text	B229
Member		Text	B30

Member	Text	B31
Party	Text	C20
Buy	Text	C21
Sell	Text	C22
Net	Text	C23
Blank row		Row 24
Buy	Text	C25
Sell	Text	C26
Net	Text	C27
Blank row		Row 28
Buy	Text	C29
Sell	Text	C30
Net	Text	C31
Deals	Integer	D20
Nominal	Integer	E20
Consideration	Float	F20
Deals	Integer	G20
Nominal	Integer	H20
Consideration	Float	I20
Deals	Integer	J20
Nominal	Integer	K20
Consideration	Float	L20
Deals	Integer	M20
Nominal	Integer	N20
Consideration	Float	O20
Deals	Integer	P20
Nominal	Integer	Q20
Consideration	Float	R20
Deals	Integer	S20
Nominal	Integer	T20
Consideration	Float	U20
Deals	Integer	V20
Nominal	Integer	W20
Consideration	Float	X20
Deals	Integer	Y20
Nominal	Integer	Z20
Consideration	Float	AA20
Deals	Integer	AB20
Nominal	Integer	AC20
Consideration	Float	AD20

## CSV Report(s)

Report Name	MemberClientPosDetail_Daily<CCYYMMDD>_a.csv		
Report type	CSV		
Delimiter	comma ","		
Total rows	Varies		
Total columns	Fixed - 30		
Heading			
	Actual/<Pattern>/(Example)	Field Type	Cell
Report Title	Member/Client Pos: Summary	Text	A1
Date Range	Trade Date	Date	B2
Date From	<CCYYMMDD>	Date	B3
Date To	<CCYYMMDD>	Date	B4
Statistic Date	None	Date	B5
Filters	None		B6
Generated	<CCYYMMDD> <HH:MM:SS>	Date & Time	B7
Top Header Row		Text	Row 9
Bottom Header Row		Text	Row 10
Data starting row			Row 11
Detail			
Field Name		Field Type	Cells
Standard Turnover (Spot Only)		varchar(100)	D-9
Standard Turnover (includes Spot)		varchar(100)	G-9
Repo 1 Turnover		varchar(100)	J-9
Repo 2 Turnover		varchar(100)	M-9
Total Turnover		varchar(100)	P-9
Structured Deals		varchar(100)	S-9
Free of Value		varchar(100)	V-9
Option Exercise		varchar(100)	Y-9
Other		varchar(100)	AB-9
Statistic Date		Date	A10
Member / Client		Text	B10
Foreign Client		Text	B11
Foreign Client		Text	B12
Foreign Client		Text	B13
Blank row			Row 14
Local Client		Text	B15
Local Client		Text	B16
Local Client		Text	B17
Blank row			Row 18
Member		Text	B19
Member		Text	B20
Member		Text	B21
Party		Text	C10
Buy		Text	C11
Sell		Text	C12

Net	Text	C13
Blank row		Row 14
Buy	Text	C15
Sell	Text	C16
Net	Text	C17
Blank row		Row 18
Buy	Text	C19
Sell	Text	C20
Net	Text	C21
Deals	Integer	D10
Nominal	Integer	E10
Consideration	Float	F10
Deals	Integer	G10
Nominal	Integer	H10
Consideration	Float	I10
Deals	Integer	J10
Nominal	Integer	K10
Consideration	Float	L10
Deals	Integer	M10
Nominal	Integer	N10
Consideration	Float	O10
Deals	Integer	P10
Nominal	Integer	Q10
Consideration	Float	R 10
Deals	Integer	S10
Nominal	Integer	T10
Consideration	Float	U10
Deals	Integer	V10
Nominal	Integer	W10
Consideration	Float	X10
Deals	Integer	Y10
Nominal	Integer	Z10
Consideration	Float	AA10
Deals	Integer	AB10
Nominal	Integer	AC10
Consideration	Float	AD10

## Worksheet 2: MEMBER\_CLIENT INSTRUMENTS

STATISTICS DATE Date on which trade will be aggregated into statistics. Left blank when report is generated at a Statistic Date: Summary level

INSTRUMENT Bond Code

MEMBER/CLIENT Foreign Client, Member, Local Client  
PARTY Buy or Sell

### **STANDARD TURNOVER (SPOT ONLY)**

DEALS Number of Trades

NOMINAL Nominal amount of trade. Can be negative for backdated Equal and Opposites

CONSIDERATION ZAR value of trade. Can be negative for backdated Equal and Opposites

### **STANDARD TURNOVER (Incl SPOT)**

DEALS Number of Trades. Can be negative for backdated Equal and Opposites

NOMINAL Nominal amount of trade. Can be negative for backdated Equal and Opposites

CONSIDERATION ZAR value of trade. Can be negative for backdated Equal and Opposites

### **REPO 1 TURNOVER**

DEALS Number of Trades. Can be negative for backdated Equal and Opposites

NOMINAL Nominal amount of trade. Can be negative for backdated Equal and Opposites

CONSIDERATION ZAR value of trade. Can be negative for backdated Equal and Opposites

### **REPO 2 TURNOVER**

DEALS Number of Trades. Can be negative for backdated Equal and Opposites

NOMINAL Nominal amount of trade. Can be negative for backdated Equal and Opposites

CONSIDERATION	ZAR value of trade. Can be negative for backdated Equal and Opposites
<b><u>TOTAL TURNOVER</u></b>	
DEALS	Number of Trades. Can be negative for backdated Equal and Opposites
NOMINAL	Nominal amount of trade. Can be negative for backdated Equal and Opposites
CONSIDERATION	ZAR value of trade. Can be negative for backdated Equal and Opposites
<b><u>STRUCTURED DEALS</u></b>	
DEALS	Number of Trades. Can be negative for backdated Equal and Opposites
NOMINAL	Nominal amount of trade. Can be negative for backdated Equal and Opposites
CONSIDERATION	ZAR value of trade. Can be negative for backdated Equal and Opposites
<b><u>FREE OF VALUE</u></b>	
DEALS	Number of Trades. Can be negative for backdated Equal and Opposites
NOMINAL	Nominal amount of trade. Can be negative for backdated Equal and Opposites
CONSIDERATION	ZAR value of trade. Can be negative for backdated Equal and Opposites
<b><u>OPTION EXERCISE</u></b>	
DEALS	Number of Trades. Can be negative for backdated Equal and Opposites
NOMINAL	Nominal amount of trade. Can be negative for backdated Equal and Opposites
CONSIDERATION	ZAR value of trade. Can be negative for backdated Equal and Opposites
<b><u>OTHER</u></b>	
OT_DEALS	(Other Trades) Number of Trades. Can be negative for backdated Equal and Opposites
OT_QUANTITY	(Other Trades) Nominal traded. Can be negative for backdated Equal and Opposites

OT\_CONSIDERATION

(Other Trades) ZAR value of trade. Can be negative for backdated  
Equal and Opposites

## Excel Report(s)

### Worksheet 2: Member\_Client Instruments

<b>Report Name</b>	MemberClientPosDetail_Daily<CCYYMMDD>.xls		
<b>Sheet Name</b>	Member_Client Instruments		
<b>Heading</b>			
	<b>Actual/&lt;Pattern&gt;/(Example)</b>	<b>Field Type</b>	<b>Cell</b>
<b>Report Title</b>	Member/Client Pos: Instrument Detail	Text	A11
<b>Date Range</b>	Trade Date	Date	B12
<b>Date From</b>	<CCYYMMDD>	Date	B13
<b>Date To</b>	<CCYYMMDD>	Date	B14
<b>Statistic Date</b>	None	Date	B15
<b>Filters</b>	None		B16
<b>Generated</b>	<CCYYMMDD> <HH:MM:SS>	Date & Time	B17
<b>Top Header Row</b>		Text	Row 19
<b>Bottom Header Row</b>		Text	Row 20
<b>Data starting row</b>			Row 21
<b>Detail</b>			
<b>Field Name</b>		<b>Field Type</b>	<b>Cells</b>
Standard Turnover (Spot Only)		varchar(100)	E-F-G19
Standard Turnover (includes Spot)		varchar(100)	H-I-J19
Repo 1 Turnover		varchar(100)	K-L-M19
Repo 2 Turnover		varchar(100)	N-O-P19
Total Turnover		varchar(100)	Q-R-S19
Structured Deals		varchar(100)	T-U-V19
Free of Value		varchar(100)	W-X-Y19
Option Exercise		varchar(100)	Z-AA-AB19
Other		varchar(100)	AC-AD-AE19
Statistic Date		Date	A21
Instrument		VARCHAR(12)	B21
Member/Client		VARCHAR(14)	C21
Local Client		Text	Column C
Local Repo		Text	Column C
Foreign Client		Text	Column C
Member		Text	Column C
Party		Text	D21
Buy		VARCHAR(4)	Column D

Sell	Text	Column D
Deals	Integer	E21
Nominal	Integer	F21
Consideration	Float	G21
Deals	Integer	H21
Nominal	Integer	I21
Consideration	Float	J21
Deals	Integer	K21
Nominal	Integer	L21
Consideration	Float	M21
Deals	Integer	N21
Nominal	Integer	O21
Consideration	Float	P21
Deals	Integer	Q21
Nominal	Integer	R 21
Consideration	Float	S21
Deals	Integer	T21
Nominal	Integer	U21
Consideration	Float	V21
Deals	Integer	W21
Nominal	Integer	X21
Consideration	Float	Y21
Deals	Integer	Z21
Nominal	Integer	AA21
Consideration	Float	AB21
Deals	Integer	AC21
Nominal	Integer	AD21
Consideration	Float	AE21

## CSV Report(s)

Report Name	MemberClientPosDetail_Daily<CCYYMMDD_b>.csv		
Report type	CSV		
Delimiter	comma ","		
Total rows	Varies		
Total columns	Fixed - 31		
Heading			
	Actual/<Pattern>/(Example)	Field Type	Cell
Report Title	Member/Client Pos: Instrument Detail	Text	A1
Date Range	Trade Date	Date	B2
Date From	<CCYYMMDD>	Date	B3
Date To	<CCYYMMDD>	Date	B4
Statistic Date	None	Date	B5
Filters	None		B6
Generated	<CCYYMMDD> <HH:MM:SS>	Date & Time	B7
Top Header Row		Text	Row 9



<b>Bottom Header Row</b>		Text	Row 10
<b>Data starting row</b>			Row 11
Detail			
Field Name	Field Type	Cells	
Standard Turnover (Spot Only)	varchar(100)	E9	
Standard Turnover (includes Spot)	varchar(100)	H9	
Repo 1 Turnover	varchar(100)	K9	
Repo 2 Turnover	varchar(100)	N9	
Total Turnover	varchar(100)	Q9	
Structured Deals	varchar(100)	T9	
Free of Value	varchar(100)	W9	
Option Exercise	varchar(100)	Z9	
Other	varchar(100)	AC9	
Statistic Date	Date	A11	
Instrument	VARCHAR(12)	B15	
Member/Client	VARCHAR(14)	C11	
Local Client	Text	Column C	
Local Repo	Text	Column C	
Foreign Client	Text	Column C	
Member	Text	Column C	
Party	Text	D11	
Buy	VARCHAR(4)	Column D	
Sell	Text	Column D	
Deals	Integer	E11	
Nominal	Integer	F11	
Consideration	Float	G11	
Deals	Integer	H11	
Nominal	Integer	I11	
Consideration	Float	J11	
Deals	Integer	K11	
Nominal	Integer	L11	
Consideration	Float	M11	
Deals	Integer	N11	
Nominal	Integer	O11	
Consideration	Float	P11	
Deals	Integer	Q11	
Nominal	Integer	R11	
Consideration	Float	S11	
Deals	Integer	T11	
Nominal	Integer	U11	
Consideration	Float	V11	
Deals	Integer	W11	
Nominal	Integer	X11	
Consideration	Float	Y11	
Deals	Integer	Z11	
Nominal	Integer	AA11	

Consideration	Float	AB11
OT_Deals	Integer	AC11
OT_Quantity	Integer	AD11
OT_Consideration	Float	AE11

## 5.17 BONDS NON-RESIDENT

### 5.17.1 Report Detail

The new Bonds Non-Resident data product gives investors and analysts a breakdown of bond trading on the JSE by the residency status of the market participants.

This data product only considers those trades that have actually settled as opposed to all booked trades. This distinction is important, as reports based on booked trades, while a reflection of trading activity, are not reflective of the *actual* inflows and outflows in the bonds market i.e. what has actually changed hands, as some of the booked trades may be cancelled and others may fail to settle.

Frequency of the data product: Daily, Weekly, Monthly and Yearly YTD, providing aggregate statistics for the specific period.

The files are made available on the Bond FTP server under main folder "Bond Non-Resident" with the various period data files in the following sub-folders.

Daily  
Weekly  
Monthly  
Yearly

### 5.17.2 Report Field Descriptions

<u>Bond Code</u>	<u>Bond alpha code</u>
<u>Buy Value</u>	<u>Rand value of bonds bought (All Trade Types)</u>
<u>Buy Quantity</u>	<u>Quantity of bonds bought (All Trade Types)</u>
<u>Sell Value</u>	<u>Rand value of bonds sold (All Trade Types)</u>
<u>Sell Quantity</u>	<u>Quantity of bonds sold (All Trade Types)</u>
<u>Net Value</u>	<u>Rand value of bonds traded (All Trade Types)</u>
<u>Buy Value</u>	<u>Rand value of bonds bought (Standard Trade Type Only)</u>
<u>Buy Quantity</u>	<u>Quantity of bonds bought (Standard Trade Type Only)</u>
<u>Sell Value</u>	<u>Rand value of bonds sold (Standard Trade Type Only)</u>
<u>Sell Quantity</u>	<u>Quantity of bonds sold (Standard Trade Type Only)</u>
<u>Net Value</u>	<u>Rand value of bonds traded (Standard Trade Type Only)</u>

## Excel Files(s)

<b><u>File Name</u></b>	Bonds Non-Resident Trading <Period> <CCYYMMDD>.xls		
	Period = “Daily” or “Weekly” or “Monthly” or “Yearly”		
<b><u>Sheet Name</u></b>	Sheet 1		
<b><u>Heading</u></b>			
	<b><u>Actual/&lt;Pattern&gt;/(Example)</u></b>	<b><u>Field Type</u></b>	<b><u>Cell</u></b>
<b><u>Report Title</u></b>	Non-Resident Report	<u>Varchar</u>	<u>A1-C1</u>
<b><u>Date Range</u></b>	Settlement Date	<u>Date</u>	<u>A2-B2</u>
<b><u>Date From</u></b>	<CCYY/MM/DD>	<u>Date</u>	<u>A3-B3</u>
<b><u>Date To</u></b>	<CCYY/MM/DD>	<u>Date</u>	<u>A4-B4</u>
<b><u>Generated</u></b>	<CCYY/MM/DD> <HH:MM:SS>	<u>Date &amp; Time</u>	<u>A5-B5</u>
<b><u>Top Header Row</u></b>		<u>Text</u>	<u>Row 9</u>
<b><u>Bottom Header Row</u></b>		<u>Text</u>	<u>Varies</u>
<b><u>Data starting row</u></b>		<u>Text</u>	<u>Row 10</u>
<b><u>Detail</u></b>			
<b><u>Field Name</u></b>		<b><u>Field Type</u></b>	<b><u>Cells</u></b>
BondCode		<u>Alphanumeric</u>	<u>A9</u>
<u>Total of all Trades</u>			
<u>BuyValue</u>		<u>Number</u>	<u>B9</u>
<u>Buy Quantity</u>		<u>Number</u>	<u>C9</u>
<u>Sell Value</u>		<u>Number</u>	<u>D9</u>
<u>Sell Quantity</u>		<u>Number</u>	<u>E9</u>
<u>Net Value</u>		<u>Number</u>	<u>F9</u>
<u>Standard Trades</u>			
<u>BuyValue</u>		<u>Number</u>	<u>G9</u>
<u>BuyQuantity</u>		<u>Number</u>	<u>H9</u>
<u>SellValue</u>		<u>Number</u>	<u>I9</u>
<u>Sell Quantity</u>		<u>Number</u>	<u>J9</u>
<u>Net Value</u>		<u>Number</u>	<u>K9</u>

## CSV Files(s)

<u>Report Name</u>	Bonds Non-Resident Trading <Period> <CCYYMMDD>.csv		
	Period = “Daily” or “Weekly” or “Monthly” or “Yearly”		
<u>Report type</u>	CSV		
<u>Delimiter</u>	comma ","		
<u>Total rows</u>	Varies		
<u>Total columns</u>	Fixed - 11		
<u>Heading</u>			
	<u>Actual/&lt;Pattern&gt;/(Example)</u>	<u>Field Type</u>	<u>Row,Column</u>
<u>Report Title</u>	Non-Resident Report	<u>Varchar(100)</u>	<u>A1-C1</u>
<u>Date Range</u>	Settlement Date	<u>Date</u>	<u>A2-B2</u>
<u>Date From</u>	<CCYY/MM/DD>	<u>Date</u>	<u>A3-B3</u>
<u>Date To</u>	<CCYY/MM/DD>	<u>Date</u>	<u>A4-B4</u>
<u>Generated</u>	<CCYY/MM/DD> <HH:MM:SS>	<u>Date &amp; Time</u>	<u>A5-B5</u>
<u>Detail</u>			

<u>Field Name</u>	<u>Field Type</u>	<u>Cells</u>
<u>Bond Code</u>	<u>Alphanumeric</u>	<u>A9</u>
<u>Buy Value</u>	<u>Number</u>	<u>B9</u>
<u>Buy Quantity</u>	<u>Number</u>	<u>C9</u>
<u>Sell Value</u>	<u>Number</u>	<u>D9</u>
<u>Sell Quantity</u>	<u>Number</u>	<u>E9</u>
<u>Net Value</u>	<u>Number</u>	<u>F9</u>
<u>Buy Value</u>	<u>Number</u>	<u>G9</u>
<u>Buy Quantity</u>	<u>Number</u>	<u>H9</u>
<u>Sell Value</u>	<u>Number</u>	<u>I9</u>
<u>Sell Quantity</u>	<u>Number</u>	<u>J9</u>
<u>Net Value</u>	<u>Number</u>	<u>K9</u>