

Domestic Money Monitoring System

DMMS TECHNICAL INSTRUCTION MANUAL

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Technical Instruction Manual

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INTRODUCTION

Domestic Money Monitoring System "DMMS" is an online-automated web based system providing efficient, secure and accurate flow of data from the market to CBE, as well as enhancing the level of analysis achieved by generating a variety of diverse Business reports.

DMMS consists of 3Sub-systems: Funds, Interbank and Interest Rates and will be used by all Banks in Egypt to report on their "Funds", "Interbank" and "Interest Rates" to CBE using New Input reports templates that are specifically designed for the new system.

This Document is intended to describe those Input Reports templates, noting that the Uploaded Input report must be exactly similar to the template described in this Technical Instruction Manual and any discrepancy will result in file rejection by the system.

A detailed and updated User Manual with system description and characteristics can be found by the following link: http://cbe.org.eg/public/DMMS_UserGuide.pdf

The latest updated version of this Instruction Manual can be found by the following link: http://cbe.org.eg/public/DMMS_Instructionmanual.pdf

I. Operating Environment

Users will use Web Browser on their own PC's (*Mandatory Application Portfolio : MS Excel 2003 version*) to access the DMM system through extranet trusted network between CBE and Banks to report required reports online in the specific predetermined **Format** (described in this document) and **Dates**.

II. Input File Data Format

- Input files uploaded by banks **MUST** be in **Excel format** using **MS-Office 2003 ONLY** and following the latest record description provided by CBE in the Technical Instruction Manual that can be accessed on http://cbe.org.eg/public/DMMS_Instructionmanual.pdf
- Input files uploaded by banks **MUST** match one of the following criteria:
 1. File Type / Format: _____ .xls using MS office – Excel 2003 (Exact Version).
 2. File Type / Format: _____ .xml using **XML spreadsheet*** format directly extracted from Banks' related business application or through MS Office-Excel 2003/greater version using **save as function**.

** To review the XML spreadsheet header and data structure check [Appendix 3 -DMMS-input templates](#).*

III. What's New in this version

- 1- Input File Data format (*.xml).
- 2- DMMS- Bank Codes as shown in [section 4.1 Appendix "1"](#)
- 3- Funds Input File & New definition.
- 4- Interest Rates Input File Notes.

1. FUND FILE

1.1. File / Sheet Name:

- Your Fund File name can be any <name>.xls Or <name>.xml ⁽¹⁾
- It **Must** contain only **ONE** sheet named "FUND".

To Review the latest record description: http://cbe.org.eg/public/DMMS_Instructionmanual.pdf

1.2. Report Design and Validations

1.2.1. FUND SHEET – ROW 1 – CELL "A1" : (Mandatory)

1.2.1.1. Record description format ⁽²⁾: *Operation_ID;Business_Day;Bank_ID;NumberofRecords*

1.2.1.2. Record Variables and description:

Record Variables	Business Description	Allowed Values / format	Example
<i>Operation ID</i>	Operation ID is fixed value per DMMS subsystem.	Identity According to Appendix "1"	Fund's Operation ID = 2
<i>Business Day</i>	Business Day Must match the Predetermined opened day for reporting on the DMMS.	YYYYMMDD	20100106
<i>Bank ID</i>	The reporting Bank code.	Identity According to Appendix "1"	"Banque Misr" Bank code =400
<i>Number of Records</i>	The number of rows that contains reporting data in the table, starting from Row 10.	Integer	If the bank will report on Five funds, expected Number of Records = 5

1.2.1.3. Cell "A1" Example

If the open day on DMMS for Fund subsystem is 31st of January 2010 and the reporter is Banque Misr who has Five (5) Funds to report on, then the cell "A1" must contain the following: 2;20100131;400;5

1.2.2. FUND SHEET – ROW 2: ROW 5

Must be empty.

N.B: DMMS will neglect any data in the above mentioned rows.

1.2.3. FUND SHEET – ROW 6: ROW 9 (Optional)

1.2.3.1. Record description labels: Table's columns labels as shown [in Appendix "3"](#)

⁽¹⁾ Using MS office – Excel 2003 (Exact Version) for *. XLS extension **OR** using *.XML spreadsheet format directly extracted from Banks' related business application or through MS Office-Excel 2003/greater version using save as function.

⁽²⁾ All mentioned data are separated by semi-colon";" with no spaces.

1.2.4. FUND SHEET – ROW 10 : ROW N (Mandatory)

The data reported by banks **must** start from Row 10 to row N (where N≥10) with no empty rows in between.

1.2.4.1. Record description format.

General Requirements:

- If any record variable has no value, "0" **must** be entered (reported) **EXCEPT** for *Dates and Method of calculation*.
- If *Dates and/or Method of calculation* have no value, the cell must be left blank.
- All amounts must be reported in **EGP THOUSAND EXCEPT** *Certificates amounts and Certificates NAV* are in **EGP**.
- *No. of certificates, No. of New Certificates, No. of Redeemed Certificates, Average Duration and Average Maturity* must be reported in real numbers.
- Any incorrect or mismatch in the report header or any lookup will result in file rejection by the system.

1.2.4.2. Record Variables and description:

<i>Sheet Column</i>	<i>Record Variables</i>	<i>Description</i>	<i>Cell Value</i>	<i>Max. Length</i>
A	<i>Serial Number</i>	Each row with data should have a serial no, which should follow an ascending sequence. It's the only optional field column.	Integer	3
B	<i>Currency ID</i>	<i>Identity:</i> Each Currency has a unique ID. Allowed Values as per Appendix 1	Integer	
C	<i>Fund ID</i>	<i>Identity:</i> Each Fund has a unique ID. Allowed Values as per Appendix "1"	Integer	
D	<i>Fund Type ID</i>	<i>Identity:</i> Each Fund Type has a unique ID. Allowed Values as per Appendix"1"	Integer	
E	<i>Fund Sub-Type ID</i>	<i>Identity:</i> Each Fund Sub-Type has a unique ID. Allowed Values as per Appendix "1"	Integer	
F	<i>Manager ID</i>	<i>Identity:</i> Each Fund's management company has a unique ID. Allowed Values as per Appendix "1"	Integer	
G	<i>Issuance Date</i>	The Fund's Issuance date.	Date YYYYMMDD	
H	<i>Initial Amount</i>	Amount must be in EGP THOUSAND .	Integer	11
I	<i>Current Amount</i>			11

J	No. of Certificates	Real number (not in Thousand).	Integer	10
K	No. of New Certificates			10
L	No. of Redeemed Certificates			10
M	NAV of certificate (Net Asset Value)		Integer	11
N	Last Coupon Amount	Amount must be in EGP THOUSAND .	Integer	11
O	Last Coupon Date	Date of the last Coupon for the Fund.	Date YYYYMMDD	
P	Equity Local	Amount must be in EGP THOUSAND .	Integer	11
Q	Equity GDR (Global Depository Receipt)		Integer	11
R	T-Bonds		Integer	11
S, Y, AN, AS, AX, BB, BH, BL	Maximum Maturity Date	Date of Maximum Maturity. (Will be repeated for <i>T-Bonds, Corporate Bonds, CDs<3Y, CDs>3Y, Repos, Reverse Repos, Foreign Assets, Other</i>)	Date YYYYMMDD	
T, Z, AE, AJ, AO, AT, AY, BC, BI, BM	Weighted Average Duration	Real numbers not in Thousand. (Will be repeated for <i>T-Bonds, Corporate Bonds, T-Bills, Deposits, CDs<3Y, CDs>3Y, Repos, Reverse Repos, Foreign Assets, Other</i>)	Integer	11
U, AA, AF, AK, AP, AU,	Weighted Average Maturity	Real numbers not in Thousand. (Will be repeated for <i>T-Bonds, Corporate Bonds, T-Bills, Deposits, CDs<3Y, CDs>3Y</i>)		11
V, AB, AG, AL, AQ, AV, AZ, BD, BF, BJ	Yield%	<ul style="list-style-type: none"> ➤ The Cell value is percentage. ➤ Must have 1 Digit after the decimal point. ➤ Will be repeated for <i>T-Bonds, Corporate Bonds, T-Bills, Deposits, CDs<3Y, CDs>3Y, Repos, Reverse Repos, Other Mutual Funds, Foreign Assets</i> 	<ul style="list-style-type: none"> ✓ Percentage ✓ Decimals : 1 	4 example: (2.1%)
W, AC, AH	Method of calculation	<p>The only accepted Text values are "MTM", "HTM" or Blank if not applicable.</p> <ul style="list-style-type: none"> ➤ "HTM" : Held To Maturity ➤ "MTM" : Market To Market. <p>(Will be repeated for <i>T-Bonds, Corporate Bonds, T-Bills</i>)</p>	Text	3

X	Corporate Bonds	Amount must be in EGP THOUSAND.	Integer	11
AD	T-Bills			11
AI	Deposits, A/C			11
AM	CDs Less than 3 years (Not Exempted)			11
AR	CDs More than 3 years (exempted)			11
AW	Repos			11
BA	Reverse Repos			11
BE	Other Mutual Funds			11
BG	Foreign Assets			11
BK	Other			11
BN, BP, BR	Holdings Retail (Foreign, Arab, Egyptian)			11
BO, BS, BQ	Holdings Corporate			11
BT	Bank's holding in the fund			11

2. INTEREST RATES FILE

2.1. File / Sheet Name:

- Your Interest Rate File (MS Office Excel 2003 format) name can be any <name>.xls Or <name>.xml⁽¹⁾
- It **Must** contain only **TWO** sheets one named "LOANS", the other named "DEPOSITS".

To Review the latest record description: http://cbe.org.eg/public/DMMS_Instructionmanual.pdf

2.2. Report Design and Validations

2.2.1. INTEREST RATE SHEET – ROW 1 – CELL "A1" (Mandatory)

2.2.1.1. Record description format ⁽²⁾: *Operation_ID;Business_Day;Bank_ID;NumberofReacords*

2.2.1.2. Record Variables and description:

<i>Record Variables</i>	<i>Business Description</i>	<i>Allowed Values / format</i>	<i>Example</i>
<i>Operation ID</i>	Operation ID is fixed value per DMMS subsystem.	<i>Identity</i> According to Appendix "1"	Interest Rate's Operation ID = 1
<i>Business Day</i>	Business Day Must match the Predetermined opened day for reporting on the DMMS.	YYYYMMDD	20100106
<i>Bank ID</i>	The reporting Bank code.	<i>Identity</i> According to Appendix "1"	"Banque Misr" Bank ID =400
<i>Number of Records</i>	The number of rows that contains reporting data in the table, starting from Row 10.	<i>Integer</i>	If the bank will report One row of data then expected Number of Records =1

2.2.1.3. CELL "A1" Example

If the open day on DMMS for Interest Rate subsystem is 31st of January 2010 and the reporter is Banque Misr who will report One row of data only then the cell "A1" must contain the following: **1;20100131;400;1**

2.2.2. LOANS / DEPOSITS SHEET – ROW 2: ROW 5

Must be empty.

N.B: DMMS will neglect any data in the above mentioned rows.

2.2.3. LOANS / DEPOSITS SHEET – ROW 6: ROW 9 (Optional)

2.2.3.1. Record description labels: Table's columns labels as shown [in Appendix "3"](#)

⁽¹⁾ Using MS office – Excel 2003 (Exact Version) for *. XLS extension **OR** using *.XML spreadsheet format directly extracted from Banks' related business application or through MS Office-Excel 2003/greater version using save as function.

⁽²⁾ All mentioned data are separated by semi-colon";" with no spaces.

2.2.4. LOANS / DEPOSITS SHEET – ROW 10 : ROW N (Mandatory)

The data reported by banks **must** start from Row 10 to row N (where N≥10) with no empty rows in between.

2.2.4.1. Record description format.

General Requirements:

- IF any record variable has no value, "0" **must** be entered (reported) **EXCEPT** for Dates.
- IF a Date record has no value, the cell must be left blank.
- All amounts **Must** be reported in **Million**. (EGP Million **OR** USD Million).
- All Percentages **Must** have **THREE** decimals (0.000%).
- Any incorrect or mismatch in the report header or any lookup will result in file rejection by the system.

2.2.4.2. Record Variables and description:

Sheet Column	Record Variables	Description	Cell Value	Max. Length
A	<i>Serial Number</i>	Each row with data should have a serial no, which should follow an ascending sequence. It's the only optional field column.	Integer	3
B	<i>Interest Rate ID</i>	<i>Identity:</i> Interest Rate ID must be either ➤ "D" for Deposits sheet or ➤ "L" for Loans sheet.	Text	1
C	<i>Currency ID</i>	<i>Identity:</i> Each Currency has a unique ID. Allowed Values as per Appendix "1"	Integer	
D	<i>Date</i>	Reporting Date.	Date YYYYMMDD	
E	<i>Amount</i>	➤ Amount must be in Million (EGP Million OR USD Million). ➤ Must have 1 Decimal.	✓ Number ✓ Decimals : 1	13 (x.0)
F	<i>Weighted Average (W.Avg)</i>	➤ The Cell value is percentage. ➤ Must have 3 Decimals.	✓ Percentage ✓ Decimals : 3	6 (x.000%)
G	<i>Minimum Rate (Min. Rate)</i>	➤ The Cell value is percentage. ➤ Must have 3 Decimals.	✓ Percentage ✓ Decimals : 3	6 (x.000%)
H	<i>Maximum Rate (Max. Rate)</i>	➤ The Cell value is percentage. ➤ Must have 3 Decimals.	✓ Percentage ✓ Decimals : 3	6 (x.000%)

3. INTERBANK FILE

3.1. File / Sheet Name:

- Your Interbank File (MS Office Excel 2003 format) name can be any <name>.xls Or <name>.xml ⁽¹⁾
- It **Must** contain only **ONE** sheet named "INTERBANK".

To Review the latest record description, http://cbe.org.eg/public/DMMS_Instructionmanual.pdf

3.2. Report Design and Validations

3.2.1. INTERBANK SHEET – ROW 1 – CELL "A1" (Mandatory)

3.2.1.1. Record description format ⁽²⁾: *Operation_ID;Business_Day;Bank_ID;NumberofReacords*

3.2.1.2. Record Variables and description:

<i>Record Variables</i>	<i>Business Description</i>	<i>Allowed Values / format</i>	<i>Example</i>
<i>Operation ID</i>	Operation ID is fixed value per DMMS subsystem.	<i>Identity</i> According to Appendix "1"	Interbank Operation ID = 3
<i>Business Day</i>	Business Day Must match the Predetermined opened day for reporting on the DMMS .	YYYYMMDD	20100106
<i>Bank ID</i>	The reporting Bank code.	<i>Identity</i> According to Appendix "1"	"Banque Misr" Bank ID =400
<i>Number of Records</i>	The number of rows that contains reporting data in the table, starting from Row 10.	<i>Integer</i>	If the bank will report 10 deals then expected Number of Records = 10

3.2.1.3. Example

If the open day on DMMS Interbank subsystem is 31st of January 2010 and the reporter is Banque Misr who reports Ten (10) Interbank transactions then the cell "A1" must contain the following: **3;20100131;400;10**

3.2.2. INTERBANK SHEET – ROW 2: ROW 8

Must be empty.

N.B: DMMS will neglect any data in the above mentioned rows.

3.2.3. INTERBANK SHEET – ROW 9 (Optional)

3.2.3.1. Record label description: Table's columns labels as shown [in Appendix "3"](#)

⁽¹⁾ Using MS office – Excel 2003 (Exact Version) for *. XLS extension **OR** using *.XML spreadsheet format directly extracted from Banks' related business application or through MS Office-Excel 2003/greater version using save as function.

⁽²⁾ All mentioned data are separated by semi-colon";" with no spaces.

3.2.4. **INTERBANK SHEET – ROW 10 : ROW N (Mandatory)**

The data reported by banks **must** start from Row 10 to row N (where N≥10) with no empty rows in between.

3.2.4.1. Record description format:

- IF any record variable has no value, "0" **must** be entered (reported) **EXCEPT** for *Dates*.
- IF a *Date record* has no value, the cell must be left blank.
- All amounts must be reported in **EGP Million**.
- *No. of Days* is a real number.
- All Percentages **Must** have **THREE** decimals (0.000%).
- Any incorrect or mismatch in the report header or any lookup will result in file rejection by the system.

3.2.4.2. Record Variables and description:

Sheet Column	Record Variables	Description	Cell Value	Max. Length
A	<i>Serial Number</i>	Each row with data should have a serial no. It's the only optional field column	Integer	3
B	<i>Currency ID</i>	<i>Identity:</i> Each Currency has a unique ID. Allowed Values as per Appendix "1"	Integer	
C	<i>Maturity Category ID</i>	<i>Identity:</i> Each Maturity Category has a unique ID depending on the no. of days. Allowed Values as per Appendix "1"	Integer	
D	<i>Trade Date</i>	Date Of the deal.	Date YYYYMMDD	
E	<i>Start Date</i>	Date when the deal is active.	Date YYYYMMDD	
F	<i>Lender ID</i>	<i>Identity:</i> The Lender Bank code. Allowed Values as per Appendix "1"	Integer	
G	<i>Borrower ID</i>	<i>Identity:</i> The Borrower Bank code. Allowed Values as per Appendix "1"	Integer	
H	<i>Amount</i>	<ul style="list-style-type: none"> ➤ Amount must be in EGP Million. ➤ Must have 2 Decimals 	<ul style="list-style-type: none"> ✓ Number ✓ Decimals : 2 	14 (x.00)
I	<i>Interest Rate</i>	<ul style="list-style-type: none"> ➤ Cell value is Percentage. ➤ Must have 3 Decimals 	<ul style="list-style-type: none"> ✓ Percentage ✓ Decimals : 3 	7 (x.000%)
J	<i>Number of Days</i>	Real Number	Integer	4
K	<i>Maturity Date</i>	The transaction's maturity date.	Date YYYYMMDD	

4. APPENDICES

The document attached in Appendix 1 is just a sample of System static data; the latest (updated) static data can be found in the DMMS– System Maintenance reports section.

4.1. Appendix 1: DMMS- Sample of Static Data (as of 30/05/2010)



Sample of DMMS
static data.xls

4.2. Appendix 2: Definitions

4.2.1. General Terms

Term	Definition
Mutual Fund	<p>A mutual fund is a company that invests in a diversified portfolio of securities. People who buy shares of a mutual fund are its owners or shareholders. Their investments provide the money for a mutual fund to buy securities such as stocks and bonds.</p> <p>There are five basic types of mutual funds:</p> <ol style="list-style-type: none"> 1) Money Market Funds. 2) Equity Funds. 3) Balanced Funds. 4) Holding Funds. 5) Islamic Funds.
Money Market Fund	Money Market Funds invest in a pool of short-term, fixed income instruments. These instruments are relatively stable because of their short maturities and high quality.
Equity Funds	Equity Funds invest primarily in stocks which represents a unit of ownership in a company.
Balanced Funds	Balanced Funds is a blend between Money Market funds and Equity funds. These funds invest in fixed income instruments as well as stocks.
Holding Funds	Holding Funds mainly invest in other funds.
Islamic Funds	Islamic Funds invest principally in Islamic stocks. They can not invest in stocks issued by companies that work in activities such as tobacco, wine...etc
Close-end fund	A close-end fund is a collective investment scheme with a limited number of shares. New shares are rarely issued after the fund is launched and are not; shares are not normally redeemable for cash or securities before Fund liquidation.
Open-end fund	Funds in which the company can always issue more shares outstanding with no restrictions on the amount of shares issued.
Repo	Repo is short for repurchase agreement. Those who deal in government securities use repos as a form of borrowing. A dealer or other holder of government securities (usually T-bills) sells the securities to a lender and agrees to repurchase them at an agreed date and price. They are usually very short-term, from overnight to 30 days or more.
Reverse Repo	The reverse repo is the opposite of repo. In this case, a dealer buys government securities from an investor and then sells them back at a later date for a higher price
Yield	Yield applies to various stated rates of returns on stocks, fixed income and some other investment type insurance products.
Demand accounts	Are deposit accounts held at a financial institution, for the purpose of securely and quickly providing frequent access to funds on demand, through a variety of different channels.
Savings accounts	Are accounts maintained by retail financial institutions that pay interest but cannot be used directly as money (by, for example, writing a cheque). These accounts let customers set aside a portion of their liquid assets while earning a monetary return. Obtaining funds held in a savings account may not be as convenient as from a demand account.
Overdraft	Occurs when withdrawals from a bank account exceeds the available balance which gives the account a negative balance - a person can be said to have "overdrawn".
Personal loan	Is a loan that is not backed by collateral, also known as a signature loan or unsecured loan. Personal loans are based solely upon the borrower's credit rating.
Certificate of deposit	A CD is a time deposit, a financial product commonly offered to consumers by banks and credit unions. A CD has a specific, fixed term (often three months, six months, or one to five years), and, usually, a fixed interest rate. Exempted CDs have maturity 3 years and above and are excluded from the Reserve ratio.
Coupon	Coupon entitles the owner to receive yearly Dividends and is considered as a part of the share.

4.2.2. Fund Input file definitions

Current amount	The current market value of the fund's total holdings.
Equity Local	Stocks traded at the local stock market including stocks in EGP, USD and Egyptian Depository Receipts.
Equity GDR	Global Depository Receipt (GDR) is a receipt for Egyptian shares traded in capital markets in London.
Issuance Date	The date the mutual fund's certificates are first offered for sale
Initial amount	The initial amount invested in the fund immediately after the subscription period.
Last Coupon Amount	The amount of the last profit distributed to clients.
Last Coupon Date	The date of the last profit distributed to clients.
Maximum Maturity Date	Maximum Maturity Date for each Asset class is The longest (utmost) maturity of all that class in the portfolio. Example: Max Maturity date for Bonds in a portfolio that contains 7 Bonds = the longest maturity of the 7 bonds.
Maximum Days To Maturity	Maximum days to Maturity for each Asset class is The longest (utmost) no. of days to maturity of all that class in the portfolio.
Method of calculation	Method of valuing the Asset class, whether: Market To Market or Held To Maturity .
Net Asset Value of certificates (NAV)	Net Asset Value is the market value of the fund's assets less the fund's liabilities, usually expressed as a per-share amount. NAV is calculated by adding up the market value of all the fund's underlying securities, subtracting all of the fund's liabilities then dividing by the number of outstanding shares in the fund.
New Certificates	Newly issued certificates for the reported period
No. of Certificates	Number of outstanding certificates; calculated by adding up the number of new and old certificates then subtracting the number of redeemed certificates. = previous no. of certificates + no. new certificates - no. of redeemed certificates.
No. of Redeemed Certificates	Number of certificates sold by clients for the reported period
Weighted Average Duration – Bonds	<p>Weighted Average Duration of the Bonds in the portfolio. The duration is the weighted average term to maturity of the cash flows from a bond. The weight of each cash flow is determined by dividing the present value of the cash flow by the price, and is a measure of bond price volatility with respect to interest rates.</p> $\text{Duration} = \frac{\left[\frac{\sum t * PV(CF_t)}{\text{Current Mkt Price}} \right]}{1 + \left(\frac{YTM}{N} \right)}$ <p>Where :</p> <ul style="list-style-type: none"> t = Respective Time Period PV = Present Value CF_t = Cash Flows at respective time period YTM = the security's yield to maturity n = number of coupon periods per year
Weighted Average Duration - T-Bills	<p>Weighted Average Duration of T-Bills in the portfolio. The duration is The weighted average term to maturity of the cash flows from a T-Bill. The weight of each cash flow is determined by dividing the present value of the cash flow by the price, and is a measure of T-Bill price volatility with respect to interest rates.</p> $\text{Duration} = \frac{\left[\frac{\sum t * PV(CF_t)}{\text{Current Mkt Price}} \right]}{1 + \left(\frac{YTM}{N} \right)}$ <p>Where :</p> <ul style="list-style-type: none"> t = Respective Time Period PV = Present Value CF_t = Cash Flows at respective time period YTM = the security's yield to maturity n = number of coupon periods per year

Weighted Average Duration - Deposits/AC	Weighted Average Duration of the bank deposits in the portfolio. Duration is the approximate percentage change in value for 100 basis point change in rates.
Weighted Average Duration - CDs	Weighted Average Duration of the CDs in the portfolio. Duration is the approximate percentage change in value for 100 basis point change in rates.
Weighted Average Duration - Repos	Weighted Average number of days remaining till the termination of the agreement "maturity date" on which the fund will return the borrowed cash and claim its collateral back from the counterparty.
Weighted Average Duration - Reverse Repos	Weighted Average number of days remaining till the termination of the deals (maturity date) on which the fund will return the received lent out cash from the counterparty and deliver the counterparty's collateral.
Weighted Average Duration -Foreign Assets	<p>Weighted Average Duration of the securities in the portfolio. Duration is the weighted average term to maturity of the cash flows from a fixed income instrument. The weight of each cash flow is determined by dividing the present value of the cash flow by the price, and is a measure of fixed income instrument price volatility with respect to interest rates. Please note in case of embedded optionality Effective duration will be required</p> $\text{Duration} = \frac{\left[\frac{\sum t * PV(CF_t)}{\text{Current Mkt Price}} \right]}{1 + \left(\frac{YTM}{N} \right)}$ <p>Where :</p> <ul style="list-style-type: none"> t = Respective Time Period PV = Present Value CF_t = Cash Flows at respective time period YTM = the security's yield to maturity n = number of coupon periods per year
Weighted Average Duration –Other	Weighted Average Duration of the securities in the portfolio. Duration is the weighted average term to maturity of the cash flows from a bond. The weight of each cash flow is determined by dividing the present value of the cash flow by the price, and is a measure of bond price volatility with respect to interest rates. please note in case of embedded optionality Effective duration will be required
Weighted Average Maturity	Of a specific asset class is the average maturity of all that class in the portfolio.
Yield %	A percentage that measures the cash returns to the security owner.
Yield% - Bonds	The weighted average yield to maturity of all bonds in portfolio. The yield to maturity is the internal rate of return assuming that bond is held until maturity and all coupons were paid.
Yield% - T-Bills	The weighted average yield of all bills in the portfolio.
Yield% - CDs	The weighted average of interest rate return of all bank CDs in the portfolio.
Yield% - Repos	The fixed interest rate of the Repurchase agreement that the Fund already paid during the reporting period for the counterparty of the transaction.
Yield% - Reverse Repos	The fixed interest rate of the Repurchase agreement that the Fund already received during the reporting period from the counterparty of the transaction.
Yield% - Foreign Assets	The weighted Average yield of all securities in the portfolio.
Yield% - Other Mutual funds	The weighted average yields of all other securities in the portfolio.

4.2.3. Interest Rates Input file definitions

Term	Definition
Loans	All Loans Values in the loan sheet reflect only the Performing Loans. <u>Non performing to be excluded</u>
Maturities	<p>N.B. Maturities in both new and outstanding Deposits/Loans should be classified each month according to their maturities upon the deal NOT according to the days left to maturity.</p> <ul style="list-style-type: none"> ➤ <= 1 Week : > 1 day <=7days ➤ <= 2 Weeks : > 7 days <=14days ➤ <= 3 Weeks: > 14days <=21days ➤ <= 1 Month: > 21days <=31days ➤ <= 2 Months: > 31days <=60days ➤ <= 3 Months: > 60days <=91days ➤ <= 6 Months: > 91days <=182days ➤ <= 1 Year: > 182days <= 364days ➤ > 1 Year: > 364 days
Min. Rate:	The least deal rate in the New deals for the respective maturity and must be calculated on simple basis not compound basis.
Max. Rate:	The highest deal rate in the new deals for the respective maturity and must be calculated on simple basis not compound basis.
New Deposits / Loans:	<p>New deals done by the bank during the month. All Renewed deposits and loans must be treated as new deals.</p> <p>N.B. Rates applied on staff deposits and loans must be listed in the outstanding deposits/loans and must not be included in the New deposits/loans.</p>
Outstanding Loans / Deposits:	<p>Reflects the balances of those loans / Deposits at end of the month.</p> <p>N.B. Rates applied on staff deposits and loans must be listed in the outstanding deposits/loans and must not be included in the New deposits/loans.</p> <p>* Balances of Outstanding deposits reported must be equal to the balances reported to the Banking Supervision Sector in CBE.</p>
Outstanding weighted average:	<p>All rates listed in the OUTSTANDING deposits/loans are simple rates weighted by their amounts as follows:</p> <p style="text-align: center;">The weighted avg. rate for a specific maturity = $\frac{\text{Total interest calculated for all amounts} \times 100}{\text{Total amounts}}$</p> <p style="text-align: center;">= $\frac{(\text{amount1} \times \text{its rate} + \text{amount2} \times \text{its rate} + \dots) \times 100}{\text{Total amounts}}$</p>

4.2.4. Interbank Input file definitions

Term	Definition
Maturities	<ol style="list-style-type: none"> 1. Overnight: one working day (can be more than 1 fiscal day depending on the holiday's calendar). 2. Less than week: more than one day and less than 7 days. It must not be overnight. 3. Week: equals 7 days and not overnight. 4. Less than month: more than 7 days and less or equal 27 days. 5. Month: more than 27 days and less than or equal 31 days. 6. More than month: more than 31 days.
Start Date	<p>Is the settlement date.</p> <p>Start and Trade dates are different in Forward Deals only.</p>
Trade date	<p>Is the agreement date.</p> <p>Start and Trade dates are different in Forward Deals only.</p>

4.3. Appendix 3: DMMS Input File templates

Funds Input file



Interbank Input File



Interest Rates Input File

