



Central Bank of Oman

Real-Time Gross Settlement (RTGS) System

Operating Rules

Version 3.2.0 – May 2023



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1. Rule 1 - General Rules

1.1. Definitions

These Operating Rules are issued by the Central Bank in pursuance of the National Payment Systems Law which governs the operation of payment systems and the provision of payment services in the Sultanate of Oman. For implementation of these Regulations, the word expressions listed in Appendix III shall have the corresponding meanings unless the context requires otherwise.

1.2. RTGS Payment System

The Real Time Gross Settlement System (RTGS) is to provide 24 X 7 Real Time electronic funds transfer system with finality for all payments made by the participants on their own behalf or on behalf of their customers for the payments effected through the RTGS including the settlement of net obligations of the Retail Payment Systems. The RTGS system will integrate with Arabian Gulf System for Financial Automated Quick Payment Transfer (AFAQ) system to process RTGS payments to GCC region.

1.3. Objective

The RTGS payment system is intended to contribute to the efficient operation of the financial system in the Sultanate of Oman. The RTGS payment system is expected to enhance liquidity, increase security of payment processing, reduce associated risks, and to promote efficiency in terms of speed, cost and robustness. Facilitate multi-currency cross border payment in the GCC Region.

1.4. Membership

Membership of the RTGS shall be mandatory to all commercial and specialized banks including full fledged Islamic banks and Islamic Windows operating in the Sultanate of Oman, or any entity as approved/directed by the Central Bank. However, Central Bank may introduce any specific criteria for membership of the RTGS system at any time in future, if needed.

1.5. Operating Rules

These rules shall govern the operations and the use of the "RTGS" as well as the roles and responsibilities of the participants and the Central Bank.

1.6. Amendments of Operating Rules

These operating rules may be amended, when deemed necessary, by Payment System Department, after necessary consultation and /or approval from appropriate authority.

Payment Systems Operations Department (PSOD) of the Central Bank shall be responsible for implementing the amendment to this document after obtaining required approvals from Central Bank Executive Management.

1.7. Usage of RTGS

1.7.1. Compliance

All participants and the Central Bank shall comply with this RTGS Operating Rules, relevant provisions of National Payment Law 08/2018 and secondary regulations for the National Payment Systems Law as amended from time to time.

1.7.2. RTGS Utility

Without prejudice to any laws of the Sultanate of Oman, all participants shall use RTGS for effecting interbank payments in Rial Omani and for processing the cross-currency payments to GCC as mandated by CBO from time to time.

Central Bank may issue directions to post the settlement files of any and/or all retail payment system operational in the Sultanate of Oman in the RTGS System.

The RTGS system is designed with business continuity plan which cope with all different scenario of failure of any part of components. Participant should refer to Rule 12.4 for the different procedure to be followed under each scenario of hardware, software or network failure.

1.8. Reference Documents

The Operating Rules refer to the following documents (hereafter referred as "Reference Documents") as a guideline for usage of the RTGS system:

AFAQ Payments Operating Rules and Regulations

GPC_AFAQ_Charging Policy for Cross-Currency Payments

AFAQ business day timetable

GPC_AFAQ_Return Rules and Regulations Addendum

Currency Conversion for AFAQ Currency Service

Any other relevant documents published by AFAQ payments from time to time.

2. Rule 2 - Participant Access

2.1. Participants

2.1.1. Membership

RTGS membership for all commercial and specialized banks is compulsory. A list of members is attached as Appendix I. The Board of Governor/ Executive Management of the Central Bank reserves the right to include Non-bank financial institutions as participants in RTGS.

2.1.2. Admission of New Members

The Central Bank may authorize the admission of new participant in RTGS provided that the Central Bank in its sole discretion deems that the new participant meets the extant qualifying criteria and executes the related National Payment Service agreement.

2.1.3. Prerequisites for the Participants

All participants shall have relevant systems, procedures and trained staff, meeting the criteria set by the Central Bank from time to time, for participation in RTGS. The Central Bank shall additionally monitor the maintenance of the specified criteria from time to time and participants shall permit access to their operations and facilities to the Central Bank for the purpose of such monitoring. Participants shall endeavor to keep their systems updated and in synchronization with the Central Bank criteria.

2.1.4. Suspension/Expulsion

The Central Bank shall have the sole discretion to suspend or expel any participant temporarily or permanently if it deems in its sole opinion that the participant has ceased to meet the qualifying criteria prescribed by it from time to time, or if the participant is declared insolvent or its banking license is revoked by the Central Bank, or the participant fails to comply with the operating rules of RTGS or any other reason deemed appropriate by the Central Bank.

2.1.5. Participants' Withdrawal

Due to merger or closure of business, a participant may opt to withdraw from RTGS by giving a formal 60 days advance written notice to the Central Bank and the Central Bank providing its consent for the withdrawal request. The Central Bank shall, as appropriate, direct the concerned participant to surrender its rights, systems, software and any other material that relates to RTGS. The participant shall comply with these directions.

2.1.6. Obligations on cessation

In the event the participant has been suspended or expelled or has withdrawn from RTGS, all its pending payment messages in RTGS shall be canceled, however,

- the concerned participant shall continue to have liability for effecting those payments to the concerned parties,.
- the participant shall also continue to remain liable for all its accrued and accruing obligations under these operating rules, including the applicability of finality and enforceability of collaterals.
- the participant shall also continue to remain liable for all its obligations towards the other payment systems in which he is a member, till the time he is member of that system,
- the participant will be automatically been suspended or expelled from all other payment systems, in which he is a direct member and
- the participant has to with-draw from all other retail payment systems before withdrawing from RTGS.

2.1.7. Revocation of Suspension

The Central Bank may, in its sole discretion, decide to revoke the suspension of the participant. In such case, the Central Bank shall serve a notice to that effect upon all the remaining participant.

2.1.8. Notice period for suspension, expulsion, withdrawal & revocation.

The Central Bank shall notify the participant being expelled or suspended by sending a communication to that effect electronically or by fax or a letter addressed to the Senior Management of the bank/participant. The notice shall be deemed delivered as soon as the electronic message is released, the fax is transmitted, or the letter delivered at the counter of the bank/participant. The other participants are also shall be advised about the suspension through a similar communication immediately.

The Central Bank shall notify all other participants about the suspension, expulsion, or withdrawal of a member by giving a (7) seven-day advance notice.

The Central Bank shall notify other participants about the re-admission of a participant as soon as possible by sending a communication to that effect.

The Central Bank will notify the suspension, expulsion, withdrawal, revocation and re-admission of any participant to all other payment systems.

2.2. Participant Accounts

2.2.1. Requirement for Participants Accounts

It is mandatory for all participants of RTGS to maintain a Settlement Account at the Central Bank. The conditions stipulated by the Central Bank from time to time shall apply for operation of the Settlement Account.

2.2.2. Collateral for Intraday Borrowings

The Central Bank may stipulate the requirement of collateral for making available the facility of intraday borrowing in the accounts of the participants. All participants shall comply with the stipulation.

2.2.3. Overdraft facility for bank participants

The overdraft policy will be issued by the Central Bank and will be circulated to all participants in due course.

2.2.4. Responsibility for maintaining sufficient liquidity

The participants shall ensure that, at any given time, they are maintaining sufficient balances in their settlement accounts for effecting payments generated by them, including Net Clearing Positions of Retail Payment Systems. It is the responsibility of each participant to monitor its settlement accounts for the purpose of maintaining liquidity and complying with the Rules of RTGS. The Central Bank shall have no responsibility for monitoring accounts of the participants.

2.2.5. The Central Bank as a Participant

The provisions of section 2.2.3 above shall not apply to the Central Bank in its capacity as a participant.

2.2.6. Record of Evidence

The account maintained by the participant in the books of the Central Bank is the evidence of the participant's clearing account and shall be binding on the Central Bank and the participant.

2.2.7. Liquidity Management Tools

RTGS shall provide liquidity management tools like account reporting, enquiry facilities, operating in real-time environment and visibility of the position in its account, to all the participants to manage the liquidity position optimally. The Central Bank in its role as regulator and operator of RTGS shall have full access and authority to generate transactions and access information on participant's settlement accounts.



3. Rule 3 - System Operations

3.1. RTGS Business Day

RTGS system is configured 24 X 7-operation mode; however, Central Bank may decide to operate the system in regular business hours or any time interval, based on the use of the system and business requirements. Hence, both central system and participants platform have a provision to disable 24 X 7 mode and reset the operating time in tune with the requirement.

RTGS shall define and notify the operating timings in advance. The Central Bank shall inform the participants in advance of any changes in the operating timings of the RTGS system. Each new business day shall have its own value date in accordance to the Gregorian calendar.

3.2. Business day administration & Timetable

The Central Bank shall perform the RTGS business day administration workplace in RTGS for participants to follow. This workplace allows inputting the holidays in the calendar of the system. The special bank holidays (not known before) declared by the regulators may also be inputted in this workplace.

The administrator of the business day can, if necessary, suspend a period or a business day and resume it back. A message will be broadcasted to all the participants to inform them about these events. All the payments received during suspension stand rejected.

3.3. Business day schedule

The RTGS system, will be operational 24 X 7 and accept the RTGS payments round the clock with two mode of operations i.e. "Normal business hour operation" and "After business hour operations". The specific functioning of system is elaborated below:

- The RTGS system cutover will be at 00:00 every day where the value date will be changed.
- The RTGS system will be configured with three windows for daily operations on any day with the following timings -

Window 1	After business hour	00:01:00 to 8:00:00
Window 2	Normal Business hour	8:01:00 to 16:00:00
Window 3	After business hour	16:01:00 to 00:00:00

- On any working day, RTGS system will operate with all the three windows (W1, W2 and W3) with the same value date.



- On weekend and public holidays, the RTGS system will operate in “After business hour” mode for full day with a single window (W1 being operated through out the day).
- Central Bank Administrator User of the RTGS system can mark any day as holiday in the system.
- The RTGS system will seamlessly switch between different windows within a given business day without manual intervention or maintenance window.
- Cancellation of pending queued payments will be executed at the end of Window 2. In this particular process all the queued payment messages from participants with value date older than “Zero” business day will be cancelled and notification is sent to participant.
- The end of day process will be automatically performed by the RTGS system at a predefined cut-off of 11:50 PM. During this end of day process, the participants shall be able to perform transaction into the next business day. This end of day process generates reports that will include the transactions from all the windows of a given working day.
- The new RTGS system will process all types domestic payments during the entire duration of “Window 2”, and does not have different session for different business payments. However, the Central Bank may define different cut-off times for payments processing with specific TTC as per their business requirements.
- Permitted after business hour operations

Participant Type	Incoming (from RTGS)	Outgoing (to RTGS)
Bank Participants	Mandatory	Based on business demand 1
National Clearing system (NCP file)	N/A	Permitted
CBO Departments & Branches	Not permitted	Not permitted 2
Ministry of Finance	Not permitted	Not permitted
MCDC	Not permitted	Not permitted

1 Any transaction that is scheduled/processed by CBO departments and involves debiting participant banks will be processed irrespective of the after business hour limit and restrictions & limit

2 Some departments may allow to send transactions (after business hours) with a certain limit ex. FOREX and MOD. This will be defined in the respective system operating rules and RTGS system access right

3.4. Interbank Transfer

The credit transfers between two participant accounts for high-value payment instructions or related secondary payments without involving the customer accounts are treated as the Interbank transfers.

3.5. Customer Transfer

Account holders of any participating bank may initiate the RTGS transaction to the credit of any other account in any other participant, using the available channels to access his bank account. The sending participant use the RTGS platform to initiate the individual credit transfers.

3.6. Central Bank Transfer

The Central Bank transfers are the payment instructions input by Central Bank and involving any participant/s settlement accounts. These transactions could be related to the Central Bank Forex Settlement, fees/penalty collection, payroll payments, monetary policy transfers, enforcement collections and any other payments entered by the Central Bank departments. Enforcement collections are transfer operations initiated by the Central Bank based on orders of any judicial authority to transfer funds from one participant's settlement account to another settlement account.

3.7. Clearing Settlement

The net settlement files of the authorized net settlement systems (retail payments clearing system), based on MT971 messages, shall be posted in RTGS system, as and then they are generated in their respective systems. The RTGS system, after successful validation of the file, presents this net settlement file to settlement engine as net transaction. RTGS system will check the availability of funds in each participants' accounts with net debit positions and if funds are available debit and credit the accounts of participants on an "all-or-none" basis. In case of lack of funds in any participant settlement account, net transaction is queued and RTGS will continue to process other transactions.

For reconciliation purpose, the Central Bank shall print a copy of the clearing transactions, which shows the net debit or credit settlement amount of each participant. After settlement, each participant, whose account was debited / credited, receives appropriate debit/credit notification (e.g., MT900/MT910). The system shall produce appropriate advice to the clearing system when the clearing results are settled.

3.8. AFAQ Payments

For more details, please refer to the Section 15 in this document.

3.9. Requests and management of reports

The direct participants and CBO operators monitor the RTGS system activities using any of the following options:

Use the Participants Portal to monitor online and to generate required reports.

Send inquiries through the RTGS system platform, via messages generated by their own core banking systems, to get reports containing information about their own detailed local RTGS activities.

3.9.1. Requests during a business day

The message interface allows participants to send inquiries and to get reports on their own detailed activity message exchange with the RTGS system. The on-line information facilities allow participants to send inquiries and to get reports on their own detailed RTGS activity message exchange. The following requests/ enquires are available:

- Get Transactions; Used to request status of transfer sent to the system.
- Get Overdraft; Used to request information on the details of the overdraft set on an account.
- Get Business Day Information; Used to request information on current business day and current business day period.
- Get Limit; Used to request information on the details of one or more reservation facilities set by the participant.
- Interim transactions report
- Participants Portal may be used for online monitoring by RTGS participants. The following reports are allowed:
 - Report on accounts;
 - Balance of accounts;
 - Account balances;
 - Payment institutions report;
 - Balance of Central Bank operations;
 - Report on transactions;
 - Report on active and passive participants;
 - Report on message types for active participants;
 - Report on account transactions;
 - Report on account transactions 940, 950.

3.9.2. Reports generated by RTGS system:

RTGS facilitates the generation of various reports, which are either printed or saved as file (in PDF or XLS formats). The list of reports are given in table below:



#	Report Name	Available for
1	Account Balance Report	CBO and participant users
2	Daily Incoming / Outgoing Transactions Report	CBO and participant users
3	Report on changes to system queue with respect of priorities, cancellation	CBO users
4	Future Dated RTGS Transfers	CBO users
5	Queue Details	CBO users
6	Queue Summary	CBO users
7	Throughput Report on hourly throughput values for each Participant	CBO users
8	Throughput Report on hourly throughput values for all Participant	CBO users
9	General Message Routing Report	CBO users
10	Cash Withdrawal/Deposit Report	CBO users
11	User Activity Report	CBO users
12	Monthly Statement of Participants' Account	CBO and participant users
13	Account Report	CBO users
14	Fees and statistics report (billing report)	CBO and participant users
15	Billing parameters Report	CBO users
16	Intraday Liquidity Report	Participant users
17	Netting statement	Participant users
18	Reconciliation report	CBO users
19	GCC Reconciliation report (this report will be part of RPG reconciliation screen and will be produced from RPG)	CBO and participant users
20	Overdraft utilization report	Participant users
21	Account balance report	Participant users
22	Analyst Transactions Query report	CBO users

At the end of day, RTGS SYSTEM delivers MX camt.053 (or its MT equivalent: either MT950 or MT940) to the CBO departments /Branches and all participants. The reports are sent for each account in each currency. Settlement banks receive reports on multi-currency transactions.

Participants are able to request Interim Transaction and Balance reports (MX: camt.052 or MT: SWIFT MT942 and MT941 messages respectively) during business day. The reports also include multi-currency transactions.

3.9.3. Management of the current and proposed balances

The dashboard (Monitoring & Control workstation) will be provided to the Central Bank RTGS users to monitor the accounts activities, participants; payment messages, and queued & rejected payments requests in the system.

3.10. Future Value Payment

The RTGS provides a value date checking function for all payment instructions. Payments with current Value Date are transmitted to the settlement engine immediately after authorization.

The RTGS system has the facility to accept future payment up to nine calendar days (excluding entry date). The future dated transactions are settled only in Window-2 on the business day on the value date mentioned in the transaction. Hence, the system does not allow the transactions with future dates, which are declared holidays in the system.

Payments with future settlement date are placed in inactive status and transfers will be activated on the settlement date. For further details please refer to Appendix VIII.

The CBO departments as participant, in the RTGS system may initiate payments without any restrictions irrespective of holidays and different windows of RTGS system depending on the business and regulatory requirement.

Under any circumstances, RTGS System will not allow back dated entry into the system.

3.11. End of window Two

At the end of Window-two, all the unsettled queued transactions with insufficient funds shall be cancelled and the system will create an empty queue for the Window-3. However, all NCP settlements transaction (if queued will be forwarded to the Window-3.

3.12. End of Day and Cut Off

The end of day process will be automatically performed by the RTGS system at a predefined cut-off 00:00 . During this end of day process, the participants will be able to perform transaction into the next business day. This end of day process will include

Generates reports that will include the transactions from all the windows of a given working day.

The value date of the RTGS system will be changed to next calander day
In case the next calander day is a working day the system will create window 1 , window 2 and window 3, however if the next calander day is a holiday only W1 will be created for the entire day.

3.13. Ownership & Licensing

The RTGS system is operated by the Central Bank which licenses the Participants to use the RTGS systems strictly in accordance with the terms and conditions of the Operating Rules laid down in this regard. The Central Bank is empowered to regulate the operations and usage of the RTGS as it deems fit.

3.13.1. Authority of the Central Bank of Oman

Controlling the installation, maintenance "including updates", operations, security, and contingency arrangements of the Central System, the Gateways, the Web Monitor Link and the telecommunication links connecting to RTGS between the Central Bank and the Participants.

Day-to-Day control over the management of operations of the Central Systems and the technical aspects of RTGS including the communication between Central System and the Gateways.

The Management of systems capacity and telecommunications traffic.

To regulate, administer and monitor RTGS.

3.13.2. Monitoring by the Central Bank

Monitoring the activities of each participant in the RTGS system electronically and by physical inspection.

To be satisfied that the participants are operating the RTGS system strictly in accordance with the related agreements, rules and regulations.

Control the risk management aspects in the system that include but are not limited to credit and liquidity risk.

4. Rule 4 – Transactions

4.1. Categories of Payment Messages

RTGS system shall handle the following types of Payment Messages:

Payment messages favouring customers or Inter-bank.

Payment Messages for same-day or future value dated as per provisions mentioned in this Rule.

4.2. Payment Message Qualification

To process a payment message in RTGS, it shall have the following prerequisites:

- The payment messages should have payment currency as Omani Rials for domestic payments or any other currency as authorized from time to time by the Central Bank.
- The payment messages are unconditional payment orders subject only to availability of sufficient funds in the Settlement Account of the payer participant.
- The payment messages are for a value date, which may be the same day or any future date as defined by RTGS. The same day messages are processed immediately and the future dated payment messages, such payment messages shall be processed on the due value date.
- The messages must be compliant with relevant MT / MX SWIFT ISO 20022 message type format rules.
- The payments are favoring for an account of the Participants with RTGS.
- The payments are for a value date, neither earlier than the date of entry, nor later than nine business days after the date of entry excluding the date of entry.

4.2.1. Time of Payment

The amount specified in a payment message sent by a sending participant shall be executed by RTGS in following manner:

- Immediately on its acceptance by RTGS system,
- Time based Payment will get executed based on the conditions set in Time indication field (11 C)
- In the case of a queued or paused payment message, when it is un-queued or un-paused provided payment is not cancelled.

4.2.2. Execution of Payment

The payment messages sent by a sending participant shall be executed in RTGS by debiting the amount to the sending participants settlement account and crediting the amount to the concerned receiving participant's settlement account.

Both the sending and receiving participants shall be advised of the execution of payment messages by RTGS.

The date of and time of a given payment message reaching the RTGS server will be considered as transaction date time. In the event of payment by RTGS system received exactly during the cutover period (window or value day), the RTGS system will automatically process the payment into next window/value date. In case if the message is received just before this event and was not executed, the behaviour will be as follows:

- In case of W1 cut-off – the system will settle the payment in W2 or put in the queue in case of lack of funds, even if it arrives in W1. The session ID for this payment will be the ID of W2.
- In case of W2 cut-off– the system will try to settle it in W3. In case of lack of funds, it will be rejected, the session ID for this payment will be the ID of W3.
- In case of W3 cut-off –the system will reject it because it cannot accept the previous business date.
- After 23: 50 the system will not accept the transaction for the current business day, it starts the cutoff procedures. At 00:00 the cut-off is done and the system will allow messages with next value date. The NCP transactions which are still in the queue will be shifted to the new business day.

4.2.3. Use of Routing Code

While sending a Payment Message in RTGS, the Sending Participant must ensure that the correct BIC code/Swift code (See Appendix I) are quoted in Account with Institution field (57). In the event the payment is favoring the receiving Participant field (58) should contain the above details.

Central Bank will not be responsible for any consequence resulting from delay in processing due to a sending participant inputting erroneous field information. When Central Bank decides to commence billing to participants for using RTGS system, Central Bank reserves the right to charge a special penalty fee to the sending participant for such an error.

In RTGS system, account number (Settlement and Reserve) representation format has been changed to standard GL account in CBO system, the mapping of old RTGS account Vs New RTGS at the Appendix-IV for reference. The payment transactions to/from various CBO department should be processed with respective department specific account numbers (for department related account details refer to Section 7), henceforth GLD/GLC keyword should not be specified in tag 72.

4.3. Transaction Reference Number (TRN)

4.3.1. TRN

Every message entered in RTGS must have a unique Transaction Reference Number (TRN) that cannot be repeated for any other message input in RTGS on a given value day for a given participant.

4.3.2. Duplication

RTGS shall reject any payment message that has the same TRN as previously received for the same value date. A notice to the effect shall be sent to the concerned participant. A transaction bearing the TRN of a previously entered transaction on the same value date shall be rejected by RTGS under intimation to sending participant.

Participant bank may receive same incoming transactions multiple copy of same transaction from RTGS core system if the RTGS system does not receive acknowledgement from the participant bank for that/last incoming transaction. Hence to avoid duplicate posting of incoming transaction at participant core system, it should perform transaction duplication check using sender participant BIC, transaction amount, value date, customer account.

4.3.3. Cancellation of Payment Messages

All requests for cancellation of payment message input in RTGS should be in a prescribed format and must have the TRN of the original payment message. This is applicable only for queued and unsettled payments and future dated payments. Once a message is cancelled it cannot be resubmitted with the same TRN.

4.4. Beneficiary Details

4.4.1. Obligations of the remitting Participant

The sending participant must ensure that sufficient and clear information is available in the payment message to facilitate the receiving participant to identify the beneficiary unequivocally; however, the sending participant

shall not be liable for any errors or incompleteness in the information provided by its customer.

4.4.2. Responsibility for correct Beneficiary details

It shall be the customer's responsibility to provide the sending participant with sufficient, correct and clear information to enable the receiving participant to identify the beneficiary unequivocally. The sending participant shall be responsible for transmitting correctly the details provided to it by the customer.

4.4.3. Identification of Beneficiary

The receiving participant shall identify the beneficiary of the funds based on traditional account number or International Bank Account Number (IBAN) and as additional due diligence the participant may verify the name, address and any other identification details provided in the payment message.

4.4.4. Money Laundering

All participants shall fully comply with the laws or regulation applicable to money laundering or terrorist funding including the law of Anti-Money Laundering and Combating Terrorism Financing, Banking Law and National Payment Systems Law.

4.4.5. Transaction Type Code

Each RTGS payment transaction is associated with a "Transaction Type Code" that defines the nature of this transaction, which determines its processing mode. The set of transaction type codes are given in the table below;

Code	Description
000	System operations
001	Ordinary transfers
002	Cash withdrawal operations
003	Cash deposit operations
004	Outgoing GCC Cross Border Multi-Currency Transfer
005	Incoming GCC Cross-Border Multi-currency Transfer
006	DVP operations
007	CBO REPO operations
008	Trading operations for Treasury Bills
009	DVP operations from Depository



Code	Description
010	Covering Net Debit position
011	Clearing transactions from clearing system
012	Clearing transactions for clearing system
013	General Ledger transactions
014	Return transactions
015	CBO Buy-back operations
016	Payroll operations
017	Fees Collection
018	Finance Payment
019	Capital Deposit/Withdrawal
020	Discounting with CBO
021	Trading Operations for CD
022	Bank Deposit Insurance Scheme BDIS
023	Pension Funds
024	Deposit facility
025	Uncollateralized interbank lending (call money market)
026	Rediscounting of CPs
027	Interbank Repo Operations
028	Interbank Buy-back Operations
029	Payroll Loan Settlement
030	Currency exchange
031	Shortage of Cash
032	Excess of Cash
033	Outgoing Foreign Transfer
034	Incoming Foreign Transfer
035	Tax Payment
036	Dividend Payment
037	Trading Operations for Government Bonds
038	Payroll End of Service
039	One Time Payment
040	Commission for T-bills
041	Commission for Bonds
042	FOREX deal between participants

Apart from above, the other transaction type codes are reserved to be used by Central Bank only. For more details about the usage of TTC & windows details (W1, W2, W3) please go the Appendix VII in this operating rule.

4.5. Irrevocability of Payment Message

4.5.1. Effect

As soon as the payment message is sent, it creates a binding obligation on the sending participant to pay the receiving participant the amount specified in the payment message in accordance with these Operating Rules.

4.5.2. Revocation of Payment Message

Notwithstanding the Provisions of Section 4.6.1, and unless the Central bank decides otherwise, the sending participant may cancel payment messages sent by it at any time until the transaction is executed in RTGS by debit to its account.

4.5.3. Setting and Amending Priorities of Payment Messages

The participants can modify the status of their payments in the queue either, by changing their priority or by cancelling and re-sending them later (which modifies the time-stamp, and consequently the order in the queue). Changing the priority to the same value also leads to moving of a transfer to the tail of a queue.

RTGS provides response/notification for request for cancellation and change priority. And notification for the queue cancellation by RTGS system.

4.6. Participants non-availability

A participant's non-availability, other than by reason of its suspension, does not affect the ability of other participants to send Payment Messages to it.

4.7. Responsibility of Receiving Participants

4.7.1. Payment Messages with Correct Beneficiary Account Number

The receiving participant upon receipt of payment message with correct account number in the "Beneficiary Customer" field (field 59), must **credit the beneficiary account immediately**. This is applicable for all the three windows (W1, W2 and W3). Only exception for this will be the time (pre-defined by the participant) where the core banking system of the participant is not available due to end of day or maintenance job. In this case, the payment messages may to be queued and updated immediately after the system is available.

4.7.2. Value to Correct Beneficiary

The receiving participant shall ensure that the value of the payment is given to the correct beneficiary as per the details in the relevant payment message.

4.7.3. Payment Returns

If the receiving participant is unable to credit the beneficiary due to incorrect data, they must return the payment immediately and not later than one business day after the value date stated in the payment message, without liability for use of funds compensation. Return of Payments

When a receiving participant is returning a payment to the sending participant, either because it could not identify the account or the payment cannot be credited to the beneficiary account due to any other reasons, the following rules apply:

- The payment message shall be pacs 004 or MT202.
- Transaction type code should be 014.
- The original transaction reference number (TRN) in (field 20) must be entered in field 21 of the return transaction (Related Reference).
- RTGS system validates return reason code in the tag :72 (Sender to Receiver Information) and if reason code populated as empty or invalid then RTGS system populate the default reason code (XX00) in return transaction when forward it to receiver.
- The reason for rejection/return to be quoted in the field 72 (Sender to Receiver Information), please refer to **Appendix V** for details.
- Note: For AFAQ payment please refer to the detailed provided in the relevant section in this document.

4.7.4. Cancellation

A future value payment message can be cancelled by the sending participant or by the Central Bank at any time before the transaction is considered for processing by RTGS system. Additionally, participant can send cancellation request on its queued payment transactions

4.8. Free Format Messages (Proprietary Messages)

4.8.1. Definition

RTGS system provides the participants with a free format message transfer function to and from the Central Bank using the Proprietary Messages.

4.8.2. Non-Value Transactions

The Free Format Messages (Proprietary Messages) are non-value transactions and do not alter the participants' settlement account.



4.8.3. Control

Free Format Messages (Proprietary Messages) are not subject to cancellations.

4.8.4. Broadcast or Individual Messages

The Central Bank may use the Free Format Messages (Proprietary Messages) to send any communication to the individual Participant or to all Participants simultaneously.

5. Rule 5 - Payment Transmission

5.1. Payment processing mode for the bank participants

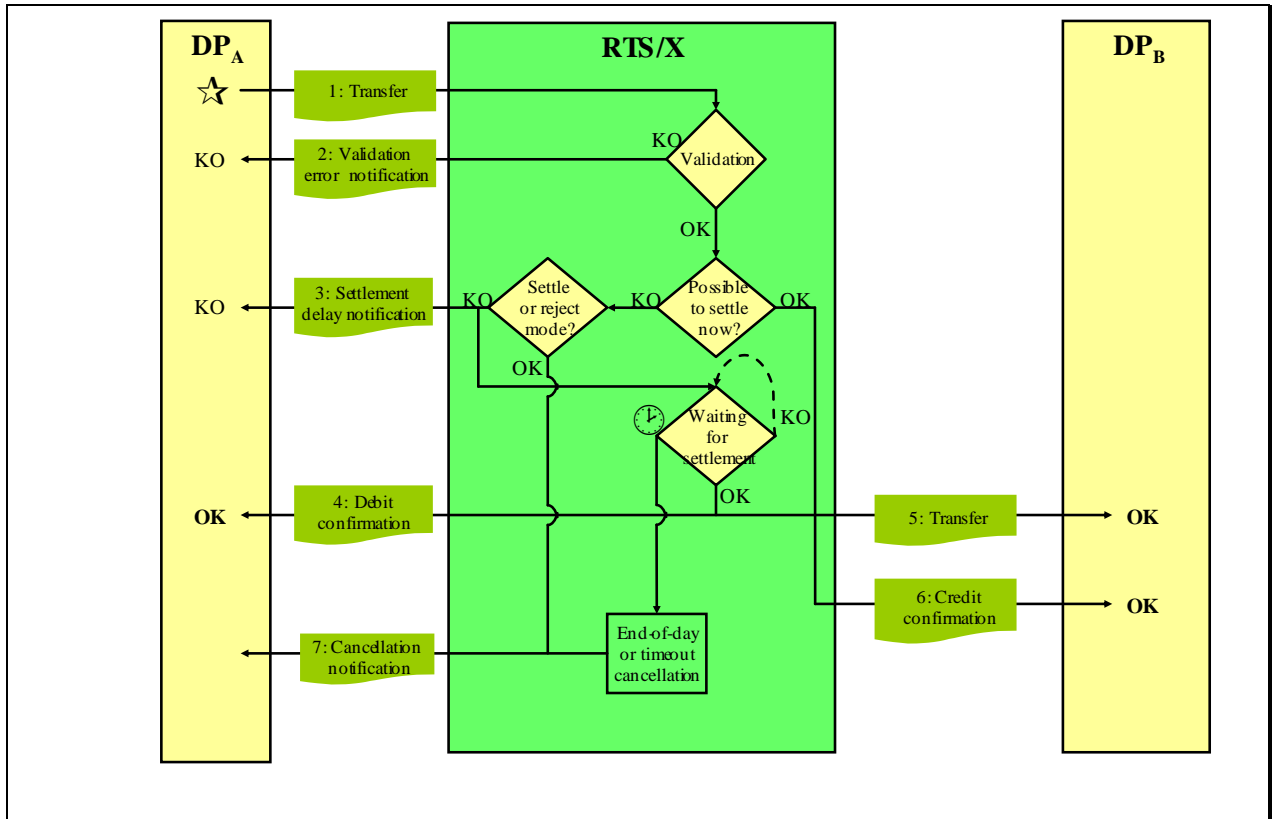
The bank participants are expected to mandatorily process all the RTGS payments in a Straight Through Processing (STP) method from the bank's core system, with industry standard security, authorisation and audit trail controls. Payments processing using the RTGS portal may be processed only as a contingency option for participants unless categorically authorised by CBO due to lower transaction volume.

5.2. Payment Message Flow Scheme

RTGS system manages the following types of payment instructions:

- Credit transfers between two participants (including CBO operations) corresponding to high-value/urgent payment instructions or secondary payments related to these transactions.
- The sending participants issue individual credit transfers that can be of two types: the general financial institution transfer (MX pacs.009 message), and the customer transfer (MX pacs.008 message), additionally they can send return transaction (MX pacs.004);
- CBO operations containing payment instructions input by CBO staff and involving participant's settlement accounts. They could be related to cash transfer, monetary policy transfers, other payments entered by the CBO departments (MX pacs.009 and pacs.008 where applicable);
- Enforcement collections are transfer operations initiated by CBO staff on the basis of third party's order (e.g. a judicial authority) in order to transfer funds from one participant's settlement account to another settlement account (MX pacs.008, pacs.009);
- The settlement of the authorized net systems balances (mass payments clearing system, cash part of the securities operations), based on MX pacs.009 message.
- Additionally, RTGS supports a possibility for authorized Participants to enter messages on behalf of other Participants. Each instruction may include additional information that specifies the purpose of the transaction, e.g. the transaction type code.

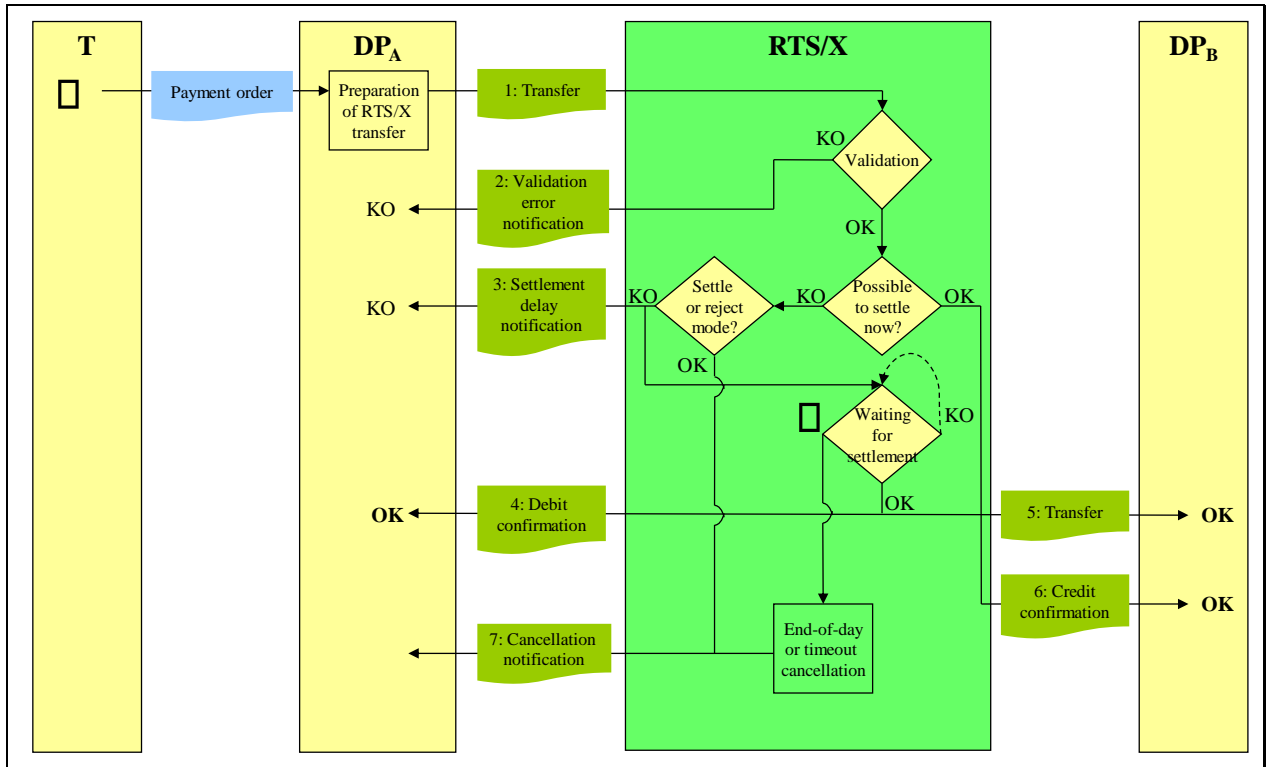
5.2.1. Direct Participant to another Direct Participant



Business scheme description

- Direct Participant A sends a payment transfer to RTGS core system
- RTGS validates this message and notifies Direct Participant A in case of rejection of the order due to errors found during validation procedure.
- RTGS tries to settle this order and notifies Direct Participant A in case of the order is queued or suspended. This message is sent to Direct Participant A only if this Participant has "Queue allowed" configured in RTGS at specific windows (W1, W2 & W3). Otherwise, this payment transfer is rejected immediately if Queued is not possible.
- After settlement of the payment order Direct Participant A receives Confirmation of Debit.
- Direct Participant B receives a copy of payment transfer
- Direct Participant B receives Confirmation of Credit.
- If this payment order remains queued or suspended at the end-of-windows session (W2) it is rejected by RTGS System automatically. Direct Participant A receives Cancellation notification accordingly.

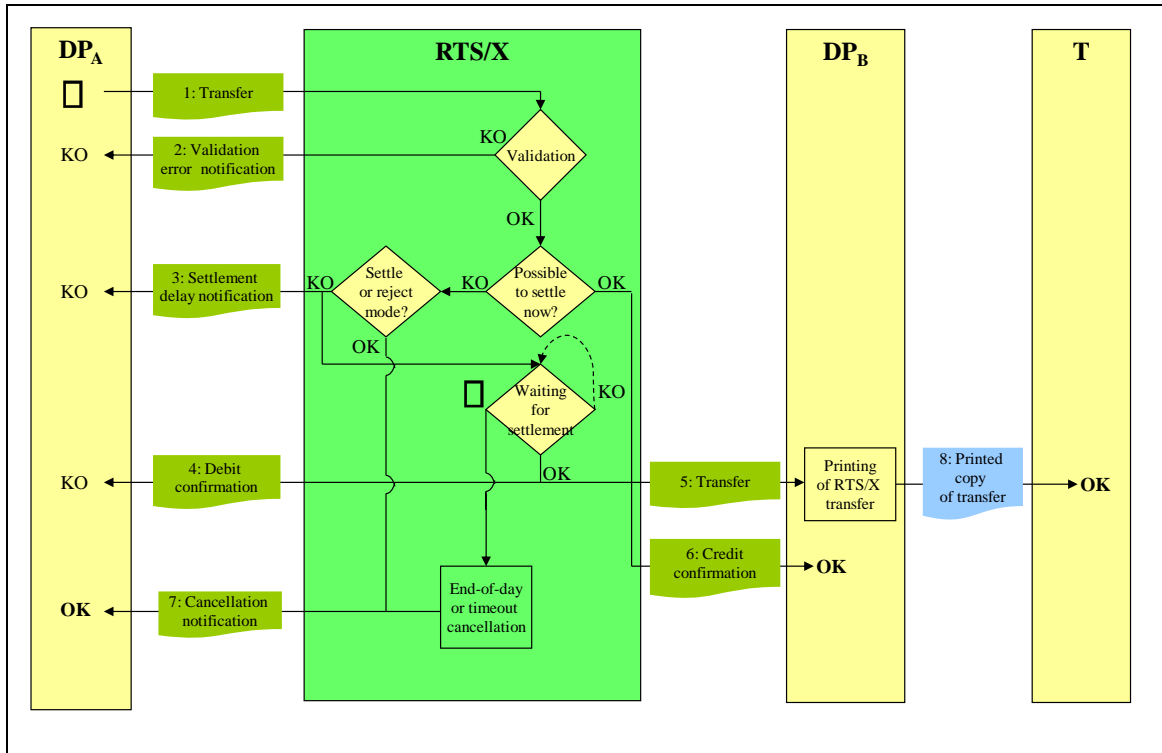
5.2.2. A Direct Participant initiating payment on behalf of its ordering Institution.



Business scheme description

- Ordering Institution T presents payment order to Direct Participant A (Sender Institution). Direct Participant prepares transfer to the RTGS and sends this payment transfer from its premises. This payment transfer should contain the following information:
- Ordering Institution Identification
- Sender Institution Identification.
- RTGS validates only Direct Participant specified sender institution identification

5.2.3. A Direct Participant to an institution under another Direct Participant



Business scheme description

- Payment transfer from direct participant A contains the following information:
- Sender identification of Direct Participant A
- Receiver identification of Direct Participant B
- Identification of Institution under Participant B.
- RTGS checks only sender and receiver identification of direct participants

5.2.4. Transaction Request & Response Message Flow

Below are messages flow in all the above scenarios and following explained with sequential order of messages mentioned in the above diagrams

Sequential number of messages in the diagram	MT message type	MX message Type	Name of message at the diagram
1	MT103 or MT202	pacs.008, pacs.009 Or pacs.004	Transfer



2	MTn96/OK/Error or MT996/RJCT	camt.025 (ERRC/ErrorCode) or pacs.002 (RJCT/ErrorCode) or admin.002	Validation error notification.
3	MTn96/Queue/PDNG	pacs.002 (PDNG)	Settlement delay notification (optional)
4	MT900	camt.054 D	Debit confirmation (optional)
5	MT103 or MT202	pacs.008 ,pacs.009 Or pacs.004	Transfer (copy to receiver)
6	MT910	camt.054 C	Credit confirmation (optional)
7	MTn96/CNCL	pacs.002 (GrpHdr - RJCT) (TxInfAndSts CANC) -	Cancellation confirmation

6. Rule 6 - Queuing Management

6.1. Queue Management

If a transaction is not executed immediately because of lack of funds on debtor's account, the RTGS system will put that transaction in a waiting for funds queue. The position in the queue is decided based on the two parameters, (i) priority of the transaction and (ii) the time of receipt of the transaction at RTGS central system. Priority is a positive integer from (1) to (99) which is used to arrange transactions in a queue. Transactions are executed according to the "priority + FIFO" principle: the transactions with the same priority value are put in a queue according to the time of their processing, "First In First Out". Transactions with the lower priority values are put in a queue after the transactions with higher priority values.

The following rules are applied to processing and settlement of transfers in RTGS:

- The time of receipt of the payment message at the central system of RTGS system, i.e. time of receiving it at the Central Node from the participant through VPN or VLAN.
- After completing the security verification of the incoming message, the RTGS system validates the payment message based on the following criteria:
 - The transfer has the current date as value date;
 - The settlement process is not frozen at the moment;
 - The accounts to be credited or debited are not locked for the related operations;
 - The participant account to be debited is not suspended;
 - If any of the above criteria is not satisfied, the message shall be rejected and a reject message sent to the sending participant.
 - If a message satisfies all the above criteria, it will be presented to the settlement engine as payment transaction.
 - The settlement engine will check the availability of funds in the sending participants account and if sufficient funds are available, it will debit the settlement account of the sending participant and credit the receiving participant.
 - If the funds are not available or not enough in the sending participant settlement account, the RTGS system will put the message in "waiting for funds queue" or reject based on the Window it is operating, as narrated below.

- During the Window - 2, The RTGS will put those transactions which cannot be executed immediately due to lack of funds, will be put in a "waiting for funds queue".
 - In the Window -1 and Window – 3, all such transactions which cannot be executed immediately due to lack of funds, will be rejected immediately and a reject message will be sent to the sending participant.
 - Retail system settlement transactions (NCP) will not be rejected in all three sessions, and will be queued.
- The payment is placed into a queue in accordance with the chosen algorithm (Priority + FIFO) if there are transactions queued for payment from the same participant with the same or higher priority. This time is registered as time of queuing.
 - The queue management algorithm processes the payment transactions in a queue according to the Priority + FIFO algorithm, where the FIFO aspect of the algorithm is based on the queuing time of the payment transactions.

6.2. Queuing and Assignment of Priorities:

RTGS System activates the queue management process for each account involved after the processing of any operation that may influence payment queues (e.g., suspension/activation of participant, locking/unlocking of account, changing of priority of transfer, cancellation of transfer, etc.). The payment messages for any participant shall be queued by RTGS until sufficient liquidity is available in their settlement account. At the close of each Window-2 of any Business Day, the Central Bank shall reject all queued payment messages and is not liable to the sending or receiving participant for this action.

6.3. Priority of Messages

Payment instructions are sequenced in a queue according to the priority scheme + FIFO algorithm. Participants or authorized CBO personnel may change the position of a payment instruction in the queue by changing the value of its priority. No payments with a lower priority may be settled if a payment with higher priority is waiting for settlement (except in special cases such as gridlock resolution).

Participants can modify the status of their payments in the queue, either by changing their priority or by cancelling and re-sending them later (which modifies the time-stamp, and consequently the order in the queue). Changing the priority to the same value also leads to moving of a transfer to the tail of a queue.

Each priority group may be allocated with “settle-or-reject” tag. If this tag is “On”, any payment with priority within this priority group will be rejected (instead of to be queued) in case of insufficiency of funds.

RTGS supports **99 priority values** for RTGS message transfers. These priorities are divided into groups. Following priority scheme will be used in RTGS:

Priority groups	Description
Priority 1	Exceptional priority used by system administrator under exceptional and urgent circumstances only. Any payment with priority 1 should pass through additional authorization*
Priorities 2...9	CBO Departments Operations transactions.
Priorities 10...20	Participant's urgent operations
Priorities 21...49	Participant's priority operations
Priorities 21...49	Participant's normal operations
Priority 99	Participant's Settle-or-Reject priority.

* CBO may adjust the priority scheme when the system configuration is carried out.

6.4. Queue Cancellation

Payment order shall be removed from a queue if:

- Payment is settled;
- Payment is cancelled by MTn92 / MX camt.056

6.5. Re-priority of Queue

Each Participant and CBO may control the queue by re-ordering of the payments in a queue (using “Change priority” message MTn95/PRTY/ MX

camt.087) or cancelling payments in a queue (using “Cancellation” message MTn92 / MX camt.056.

A Participant may change status of a payment sent by him earlier by changing the value of its priority. RTGS generates also notification message (pacs.002) to the participant who issued the corresponding transfer, for each transfer status change. Participants are granted to change a priority of the payment.

6.6. Grid Lock Resolution

Gridlock occurs when two or more payment queues are blocked due to shortage of funds, although when all queued payments are settled, there may be no shortage of funds. RTGS detects gridlock situation and selects those payments that can be settled on a Net basis whilst preserving the normal business conditions attached to the transactions.

RTGS automatically detects possible Gridlock and issues the appropriate alarm. The following parameters are set for this purpose:

- Number of payment instructions queued by the system,
- Amount of funds in payment instructions queued by the system,
- Number of payments that were queued since last posting operation by the system.

If any of the above set parameters is reached, RTGS issues an alert to the System Administrator(s) informing him about this situation.

The Gridlock resolution mechanism is initiated manually by CBO System Administrator using CBO Monitoring & Control workstation. The System Administrator(s) may check all balances of accounts in the system. The System Administrator(s) decides if the Gridlock Resolution procedure should be initiated.

During the Gridlock resolution process, payment instruction queues are frozen and new payment instructions are not “taken into account” until the process is complete. After re-activation of normal Business Window, these new payment instructions will be activated automatically on queue-ordering basis.

Gridlock resolution mechanism (based on optimization algorithms) can be configured to be initiated automatically by the system at the predefined and configurable intervals. For example, after each window.

The Central Bank shall be authorised to initiate the Gridlock resolution mechanism manually.

7. Rule 7 - Central Bank of Oman Payment

7.1. General

7.1.1. Central Bank Transaction

The Central Bank shall be a participant and is subject to these rules. All payment messages posted by the Central Bank shall be settled immediately.

7.2. Payments from Central Bank to Participants

The Central Bank shall credit or debit transactions to participants' settlement accounts for the following types of payment.

7.2.1. Incoming Forex Payment

International Settlement Department (ISD) will send a MT202/ pacs.009 payment instruction to RTGS for settlement of the Omani Rial leg of a foreign exchange deal transaction in which Central Bank is the buyer of the foreign currency and the participant is the seller of the foreign currency. The payment will debit the Central Bank settlement account and credit to a participant settlement account in RTGS.

The payment will use the following transaction type code **034** in the payment instruction.

Department Payments	Debit A/C	Credit A/C	Transaction Type code	BIC Code
International Settlement Department	01-000-910008-OMR-95004-000-0000	Participant SA	034	CBOMOMRU

7.2.2. Market Operations Department

Market Operations Department (MOD), DEPO/X System will send MT202 pacs.009 payment instructions to RTGS for the below types of Market Operations Department.

Apart from sending and receiving of payments via RTGS, the processing of the below-indicated transactions, rest all aspects including but not limited to all monetary instruments, principal, interest and commission amount calculation shall follow SSS System Operating Rules and Procurers as defined by the respective department of Central Bank of Oman.



Monetary Operations Payment	Debit A/C	Credit A/C	Transaction Type code	BIC Code
Intraday Repo with CBO	01-000-910008-OMR-95005-000-0000	Participant SA	007	CBOMOMRU
Overnight Repo with CBO	01-000-910008-OMR-95005-000-0000	Participant SA	007	CBOMOMRU
Trading Operations:				
Auction Settlement of Treasury Bills	Participant Bank SA	MoF SA: 01-000-232001-OMR-00000-000-0000	008	CBOMOMRU
Maturity Treasury Bills	MoF SA: 01-000-232001-OMR-00000-000-0000	Participant Bank SA	008	
Auction Settlement of Government Bonds	Participant Bank SA	MoF SA : 01-000-232001-OMR-00000-000-0000	037	
CBO CDs Inception/ Settlement	Participant Bank SA	01-000-910008-OMR-95007-000-0000	021	
CBO CDs Maturity	01-000-910008-OMR-95007-000-0000	Participant Bank SA	021	
Buyback of Intraday Repo with CBO	Participant Bank SA	01-000-910008-OMR-95005-000-0000	015	CBOMOMRU
Buyback of Repo with CBO	Participant Bank SA	01-000-910008-OMR-95005-000-0000	015	CBOMOMRU
Discounting of T-bill with CBO	01-000-910008-OMR-95014-000-0000	Participant Bank SA	020	CBOMOMRU
Rediscounting of Commercial Papers	01-000-910008-OMR-95018-000-0000	Participant Bank SA	026	CBOMOMRU
Interbank-Repo Operations	Buyer Bank SA	Seller Bank SA	027	CBOMOMRU



Monetary Operations Payment	Debit A/C	Credit A/C	Transaction Type code	BIC Code
Interbank Buy-Back Operations	Seller Bank SA	Buyer Bank SA	028	CBOMOMRU

Note:

- In above table 'SA' represents Settlement Account in RTGS system.
- Future enhancements/ Services in CBO Monetary Operations will be announced to the licensed banks through CBO SSS Operating Rules and Regulations.
- Operating Rules of RTGS in relation to CBO Monetary Operations System (SSS) is limited to Cash leg transactions (MT202) received by RTGS from SSS. Please refer to the Operating Rules of CBO SSS for all CBO Monetary Operations Activities: (Issuance of Government Bonds, Treasury Bills, Certificates of Deposit), and liquidity Management and Standing Facilities (Repo with CBO (Intraday and Overnight), Interbank Repo, Discounting of Treasury Bills, and Rediscounting of Commercial Papers.

7.2.3. Central Bank Bills Payment

Accounts & Procurement Department shall send either MT103 or MT202 payments via RTGS to transfer funds to participant banks for paying various Central Bank bills to suppliers who hold bank accounts with the respective participant banks.

The payment will use the following transaction type code of the payment instruction.

Department Payments	Debit A/C	Credit A/C	Transaction Type code	BIC Code
Accounts & Procurement Department	01-000-910008-OMR-95012-000-0000	Participant SA	018	CBOMOMRUFID



7.2.4. Payroll Payments

Pay & Benefits Department shall send MT 103 and MT202 payments via RTGS to transfer funds to the respective participant banks for paying salaries and other payments to the Central Bank employees. The payment will use the following transaction type code of the payment instruction.

Department Payments	Debit A/C	Credit A/C	Transaction Type code	BIC Code
Pay & Benefits Department	01-000-910008-OMR-95010-000-0000	Participant SA	016	CBOMOMRUHRD

7.2.5. Bank Deposit Insurance Scheme

Accounts & Procurement Department shall send MT103 and MT202 payment via RTGS to transfer funds to the respective participant banks for payment of any insurance claims accepted by the Central Bank
The payment will use the following transaction type code of the payment instruction.

Department Payments	Debit A/C	Credit A/C	Transaction Type code	BIC Code
Accounts & Procurement Department	01-000-910008-OMR-95015-000-0000	Participant SA	022	CBOMOMRU

7.2.6. Pension Fund

Accounts & Procurement Department shall send (MT202) payment via RTGS to transfer funds to the respective participant banks for paying pension to the Central Bank retired employees.
The payment will use the following transaction type code of the payment instruction.

Department Payments	Debit A/C	Credit A/C	Transaction Type code	BIC Code
Accounts & Procurement Department	01-000-910008-OMR-95016-000-0000	Participant SA	023	CBOMOMRU

7.3. Payments from Participant to Central Bank

7.3.1. Outgoing Forex Payment

International Settlement Department, WSS System will send a MT202 payment instruction to RTGS for settlement of the Omani Rial leg of a foreign exchange deal transaction in which the Central Bank is the seller of the foreign currency and the participant is the buyer of the foreign currency. The payment will debit participant settlement account and credit to the Central Bank Settlement Account in RTGS.

The payment will use the following code words of the payment instruction.

Department Payments	Debit A/C	Credit A/C	Transaction Type code	BIC Code
International Settlement Department	Participant SA	01-000-910008-OMR-95004-000-0000	033	CBOMOMRU

If the outgoing Forex payment is valued on Friday or a scheduled holiday, the Central Bank shall use a special business schedule shall be on the Friday or holiday in which only valued Forex payments shall be allowed for settlement. Under such situations, when the business day cycle for Thursday or the day before holiday is completed, the Central Bank shall perform settlement of Forex payment using the special business day schedule.

After the special business day schedule is completed, the Central Bank shall close the system. System shall only be open again on the next business day. Participants need to ensure their settlement accounts have sufficient fund at the end of Thursday business day or business day before holiday.

7.3.2. Banking Fees payment to Central Bank

Participants shall send MT 103 and MT 202 payments via RTGS to transfer funds to CBO for paying banking fees e.g. license fees.

The payment will use the following code words of the payment instruction.

Department Payments	Debit A/C	Credit A/C	Transaction Type code	BIC Code
Accounts & Procurement Department	Participants SA	01-000-910008-OMR-95011-000-0000	017	CBOMOMRU

7.3.3. Bank Deposit Insurance Scheme

The respective participants shall send (MT202) payment via RTGS to transfer funds to the CBO for payment of any insurance premium due to the Central Bank

The payment will use the following transaction type code of the payment instruction.

Department Payments	Debit A/C	Credit A/C	Transaction Type code	BIC Code
Accounts & Procurement Department	Participant SA	01-000-910008-OMR-95015-000-0000	022	CBOMOMRU

7.4. Currency Management Department

Cash withdrawal & deposit operations are carried out with Currency Management Department (CMD) in Muscat, Sohar, and Salalah branches respectively. Cash Management System (CMS) primarily interact with RTGS for processing of relevant cash legs of these operations. All business operations including but not limited to the interaction with participants, such as request for cash withdrawal, confirmation/rejection of request is completed in the CMS.

Department Payments	Debit A/C	Credit A/C	Transaction Type code	BIC Code
Currency Department Cash Withdrawal Operations	Participant SA	01-000-910008-OMR-95001-000-0000	002	CBOMOMRUCUR



Department Payments	Debit A/C	Credit A/C	Transaction Type code	BIC Code
Currency Department Cash Deposit Operations	01-000- 910008- OMR- 95001-000- 0000	Participant SA	003	CBOMOMRUCUR

In addition to the above codes 002 & 003, there are some transactions related to currency department for reporting cash shortage 031 & cash excess 032.

8. Rule 8 - Finality of Payment

8.1. Definition of Finality

As prescribed in section 4.6 sub section 4.6.2 under Revocation of Payment Message, Once the Settlement account of the sending participant has been debited and the receiving participant settlement account has been credited, the payment is deemed final.

In AFAQ System, the finality definition is as below

A payment is deemed final after the account of the sending direct participant has been debited in the CBO domestic RTGS system. Please refer to AFAQ ORR.

8.2. Irrevocability of Transfer

The rules provided in the National Payment Systems Law (NPSL) for Finality and irrevocability shall be applicable to all RTGS transactions.

8.3. Dispute relating to Returns of Funds

In case of any court action and an order made for return of the money (i.e. in the case of the bankruptcy provisions under the Commercial Law or in case of the Money Laundering Law, the Commercial Law and the Penal Code or any other law which may allow for the recovery of funds incorrectly or illegally paid), this shall not result in “unwinding” of the actual transfer of funds executed in the system as per these rules, the proper application of law is to seek a court order to compel recipient to repay the funds. For any customer dispute issues, the person might approach CBO customer service.

9. Rule 9 - Testing, Certification and Change Control

9.1. Participant Pre-requisite

In principle approval provided by the CBO Executive Management to enroll as participant in the RTGS system

Each participant is required to perform all necessary modifications to its own systems linked to the RTGS systems at its own expense, and ensure implementation and adherence to all relevant procedures as may be required.

9.2. Service Level Specification

The Central Bank may from time to time specify the service levels to be provided by RTGS and determine the service levels of the participants' systems, used in relation to the RTGS.

9.3. Certification Requirement

Any new Participant has to fulfil the following requirement prior to connecting to the RTGS production system and commence live operations:

- Complete the internal UAT and SIT of the RTGS interface
- Complete the RTGS certification process accordance to the script and conditions defined by CBO
- Submit the Declaration for the Participant Certification completion (Document to be provided separately by the Central Bank)
- Sign and submit the Agreement for the Provision of CBO National Payment Service.

9.4. Participants' Responsibility

- To develop their internal systems for linking to / from RTGS and the maintenance, security and reliability (including back-up and contingency arrangements) of such systems at its own cost.
- To operate, administer and monitor RTGS interface module installations at their site using facilities made available by the system.
- Day to day responsibility for operating its RTGS Gateway, host system and the interface between its own host system and RTGS Gateway.



- It is the responsibility of each Participant to ensure that it generates the correct payment messages that meet the Operating Rules of RTGS.
- All the RTGS participants are expected to process the incoming RTGS transactions 24x7 in a real time basis and pass the required entries into customer account (if applicable) as per the value date of the transaction and a notification message sent to the customer via email and SMS
- Every RTGS participant will have to ensure the required funding in the participant RTGS settlement account is maintained at all the times.
- The RTGS participant that intends to process the RTGS outward payments in W1 and W3 are required to configure the relevant limits in the RTGS portal.
- The RTGS participant may enable RTGS transaction processing (as an option) on all delivery channel (where possible) with clear definition of charges and other terms and conditions.

9.5. Mandatory Reporting by Participant

Each participant is required to advise the Central Bank immediately of any event, which may affect its role of function as a participant in RTGS, including any known or planned disconnection from RTGS, or any significant changes to its host system interface to RTGS, its organization structure, or environment.

9.6. Internal operating guideline and procedure

Each participant and the Central Bank shall prepare and implement its own internal guidelines and procedures, to ensure that they are compliant with the Operating Rules laid down. Each participant shall submit a copy of such internal guidelines to the Central Bank for approval before commencing use of the RTGS.

9.7. Operations by Participants

Each participant shall operate the areas of RTGS, in line with its control and responsibilities, as laid down in the control documents.

9.8. Change Control

9.8.1. RTGS changes

The Central Bank is authorized to make any changes to RTGS and to the Control Documents, and advise the participants accordingly, giving reasonable notice to all participants before the changes are implemented. The Central Bank may also provide directions for the safe and timely implementation of changes and for accurate and timely up-date and distribution. Changes may also include additions and enhancements, and



shall be binding on all the participants. Participants may propose changes to these operating Rules to the Central Bank, for its consideration and approval, however, the Central Bank shall not be obliged to implement any such change.

9.8.2. Implementation of changes

Each participant shall ensure that its internal procedures and systems have the capability to deal effectively with all such changes to the control documents.

10. Rule 10 - Fees and Charge

10.1. Transaction Fees and Charges

The Participant shall pay the fees and charges in the amounts and manner prescribed by the Central Bank, which may be amended by the Central Bank at its own discretion, from time to time, as when deemed appropriate. The types of fees and charges may be charged by CBO and AFAQ are given in the table below:

#	Type of fee	Criteria
1	Domestic Interbank payment	per transaction
2	Domestic Customer transfer	per transaction
3	AFAQ Interbank payment	per transaction
4	AFAQ Customer transfer	per transaction
5	Domestic RTGS Membership	Per engagement
6	AFAQ RTGS Membership	Yearly
7	Domestic RTGS enrolment	One time
8	AFAQ enrolment	One Time
9	Domestic RTGS Certification	Per engagement
10	AFAQ Certification	Per engagement
11	Wrong routing	Per transaction

10.2. Maximum customer Fees (by Banks):

The customer shall pay the fees and charges in the amounts and manner prescribed by the Central Bank, which may be amended by the Central Bank at its own discretion, from time to time, as when deemed appropriate.

#	Type of fee	Criteria
1	Domestic Interbank payment	per transaction



2	Domestic Customer transfer	per transaction
3	AFAQ Interbank payment	per transaction
4	AFAQ Customer transfer	per transaction
5	Domestic Interbank payment(online)	per transaction
6	Domestic Customer transfer(online)	per transaction
7	AFAQ Interbank payment(online)	per transaction
8	AFAQ Customer transfer(online)	per transaction

10.3. Overdraft fee and Charges

The fees & charges for the overdraft facility will be communicated to the participants after the finalizing the implementation date of overdraft facility.

10.4. Collection of Fee and Charges

The Central Bank will debit the settlement account of the participants for the charges on daily, monthly, quarterly or yearly basis, as the case may be, from time to time.

Note: The Central Bank will publish the fees and charges applicable for RTGS and AFAQ transactions, in separate circular, from time to time.



11. Rule 11 - Emergency Condition**11.1. Authority**

The Central Bank has the special authority to perform the appropriate action under the emergency conditions

11.2. Failure of Clearing Settlement

In case of shortfall in any one or more participant, the Central Bank shall not unwind the net settlement file or all clearing transactions for those participants. It is the responsibility of the participant to fund their settlement account with any one or more options given below:

- Utilize the overdraft limit available for the respective bank participants;
- Borrows funds from the interbank market;
- Participant to request CBO for liquidity via Repo operations.

12. Rule 12 - Disciplinary

12.1. Authority

The Central Bank has the special authority to take necessary timely action on the Participants to ensure efficient operation of the RTGS.

12.2. Suspension of Participant

The Central Bank shall have the sole discretion to suspend or expel a participant temporarily or permanently if it deems in its sole opinion that the participant has ceased to meet the qualifying criteria prescribed by it from time to time, or if the participant is declared insolvent or its banking license is revoked by Central Bank, or the participant fails to comply with the operating rules of RTGS or any other reason deemed appropriate by the Central Bank.

12.3. Suspended Participant's obligation

In the event a participant has been suspended from RTGS, all its pending payment messages shall be cancelled but the suspended participant shall continue to be liable for making payments to the concerned parties. The suspended participant shall also remain liable for all its accrued and accruing obligations under RTGS rules. The Central Bank shall direct the suspended participant to surrender its rights, systems, software and any other material related to RTGS.

12.4. Suspension Notification

The Central Bank shall notify in writing the Participant being suspended by sending a communication to that effect electronically or by fax or a letter addressed to the Senior Management of the Participant immediately. The notice shall be deemed delivered as soon as the electronic message is released or the fax is transmitted or the letter delivered at the counter of the participant. The other participants shall be advised of the suspension through a similar communication immediately.

12.5. Re-admission

The Central Bank shall notify other participants about the re-admission of a suspended or temporarily withdrawn participant as soon as possible by sending a communication to that effect.

**13. Rule 13 - Default Processing****13.1. Authority**

The Central Bank has the authority to suspend a defaulting Participant, as per the provisions prescribed in these operating rules or as per the Banking Law.

13.2. Notification of Default

Notification of Default shall be governed by Clause number (8) of the "Agreement for the Provision of the Central Bank of Oman National Payment Systems" agreement document.

13.3. Participant Obligation

Participant obligation shall be governed by Clause number (8) paragraph 8.2 of the "Agreement for the Provision of the Central Bank of Oman National Payment Systems".

14. Rule 14 - Obligation to Law (Miscellaneous Provision)**14.1. Central Bank of Oman**

Notwithstanding anything to the contrary stated in the RTGS rules and regulations or any of the reference documents. The Central Bank and its officers, employees and/or agents shall not be liable to the Participants or any other third party for any losses and damages or expenses incurred by them directly or indirectly from any of the following:

- Delay caused due to breakdown, malfunctioning or deficiency of RTGS system including hardware, software, telecommunication and electrical systems.
- Partial or complete disruption or failure of RTGS to provide all or any other services provided by RTGS.
- For the losses caused due to failure of the participant's systems.
- The negligence, fraud, dishonesty, misconduct, unfamiliarity or omission of the participant or its official or employee in the use of RTGS.

However, the Central Bank shall be liable for losses caused due to gross negligence or wilful misconduct of its officers, employees or any other person acting under the direction of the Central Bank and has been found guilty of a reckless act or omission, or of intentional misconduct, proved in a final decision made by a competent court in the Sultanate of Oman.

14.2. Fraud

Any loss arising due to fraud originated at the Participant's business shall be borne by the relevant Participant.

Central Bank is authorized to interrupt any transaction should Central Bank identify any suspicion of money laundering activities relating to a particular transaction.

14.3. Force Majeure

The Central Bank or any Participant shall not be liable for any losses or any non-performance of the Operating Rules or of payment messages or of any obligation in relation to RTGS arising directly or indirectly from circumstances beyond its or his reasonable control. This shall include without limitation: strike, lockout, equipment malfunction, government action, riot and war.

14.4. Central Bank Personnel

Nothing in this rule shall prejudice the liability of the Central Bank or officers, employees or agents of the Central Bank for their acts or omissions as specified by the laws of the Sultanate of Oman.

14.5. Officers, employees and Agents

The Central Bank retains the benefit of Rule 14 subsection 14.1 and 14.2 for itself and for the benefit of its officers, employees and agents.

14.6. Emergencies

If any malfunction, breakdown, or interruption or any emergency affects RTGS or its operations, transactions shall be handled in accordance with the directions of the Central Bank. Without limiting the discretion of the Central Bank, the Central Bank may extend or curtail the hours of operations of RTGS, pause any Participant, direct the use of contingency facilities or close down RTGS in whole or in part. The Central Bank shall not be liable for any directions so given.

14.7. Participants Act as Principals

Each participant shall be liable as principal in respect of its payment messages.

14.8. Assignments

No Participant shall assign all or any of its rights or obligations accruing from the membership of RTGS and the National Payment Service Agreement. The Agreement however binds the successors of each Participant.

14.9. Dispute Settlement

In the event of any unresolved disputes or claims arising between any persons in relation to these Operating Rules or any directives issued pursuant to them, the complainant may submit the dispute or claim for investigation and decision by the Central Bank's Payments System department.

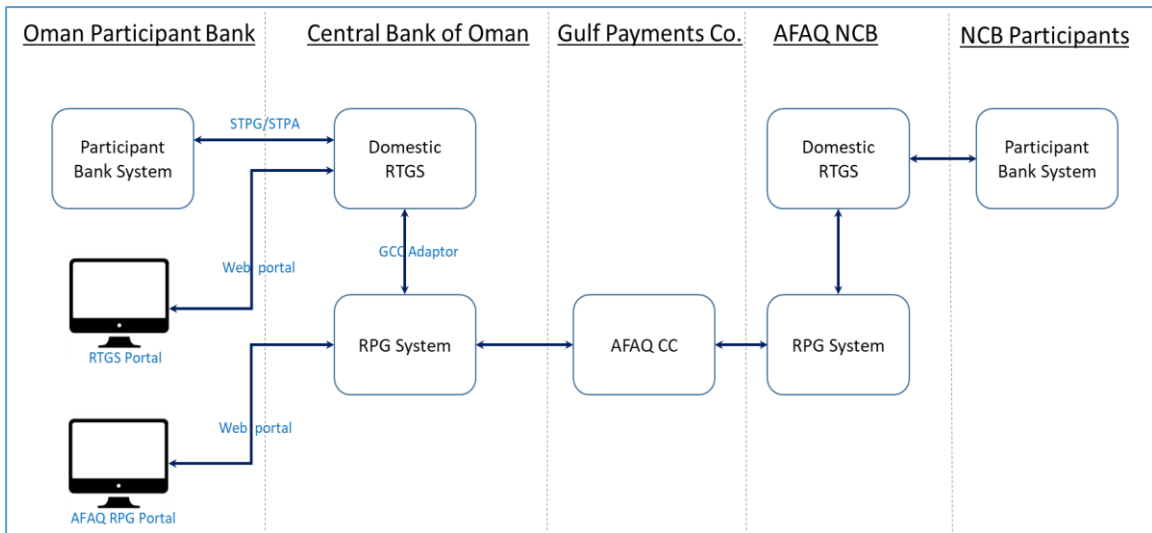
14.10. Governing Law

The Laws of the Sultanate of Oman govern this Operating Rule.

15. AFAQ Payments

The Gulf Payments Company (GPC) was established, based on the decisions made by the Supreme Council of the Gulf Cooperation Council, to build and operate the GCC Real Time Gross Settlement system (RTGS). The GCC-RTGS System is owned and managed by the National Central Banks (NCBs) of the Six GCC countries (United Arab Emirates, Kingdom of Bahrain, Kingdom of Saudi Arabia, Sultanate of Oman, Qatar, and Kuwait).

The AFAQ cross-currency RTGS service involves the GCC NCBs as account holding and customer service providing institutions and the GPC as technical service provider for the smooth functioning of the cross-currency RTGS service as a whole. The detailed workflow and other technical details along with the operating rules are given in figure below:



15.1. AFAQ General Rules:

Oman Participant banks shall process all outward payments to GCC countries using AFAQ payment system, however should some of the specific flavour of GCC payments that is not vaialble in the AFAQ system can be processed through SWIFT network for six months of the RTGS system go-live date or untill the CBO published deadline (whichever is latter).

AFAQ system will not process any future dated payments.

AFAQ payments can only be processed during the business window as detailed in the business day time table of AFAQ system:

#	Event	Short Description	Timing (Riyadh time zone)
System Start			
1	FX Translation Rate adjustment	At the beginning of the period, AFAQ Operator ensures that the start of the day balances for all accounts are zero. NCBs send messages with the official rate for their currency against the USD.	08:00-08:15
2	FX Translation Rate authorization	At the beginning of the period, AFAQ Central Component (CC) calculates the cross-rates and delivers them to NCBs for approval. NCBs send authorization messages: either approval or decline. In case no approval or decline is received, the FX rate is considered as not approved.	08:15-08:30
		The system will prohibit cross-border payments for unconfirmed pair of currencies. On deactivation of the period, the system sends FX Translation rates notifications for all approved currency pairs and calendar notifications to the NCBs.	
3	Exchange Period for All Types of Payments	Exchange window for any type of payments. (Including returns initiated by the participants). On deactivation of the period: - Cut-off for exchange payments period. - Automated return of cross-currency payments by CC, which cannot be delivered to the RPGs of the receiving countries. - Automated cancellation of the unsettled cross-currency payments (relevant for Country Specific Model "CSM"- automated cancellation of queued payments).	08:30-13:30
4	Reporting, Reconciliation, and Confirmation	- Generation of statements and Net Position reports. - All NCBs must reconcile the reports received (statements and net position reports). - All NCBs must send confirmation of Net positions.	13:30-14:30
5	Net Settlement Window	Settlement operations starts outside AFAQ system.	14:30-15:30
End of business day			



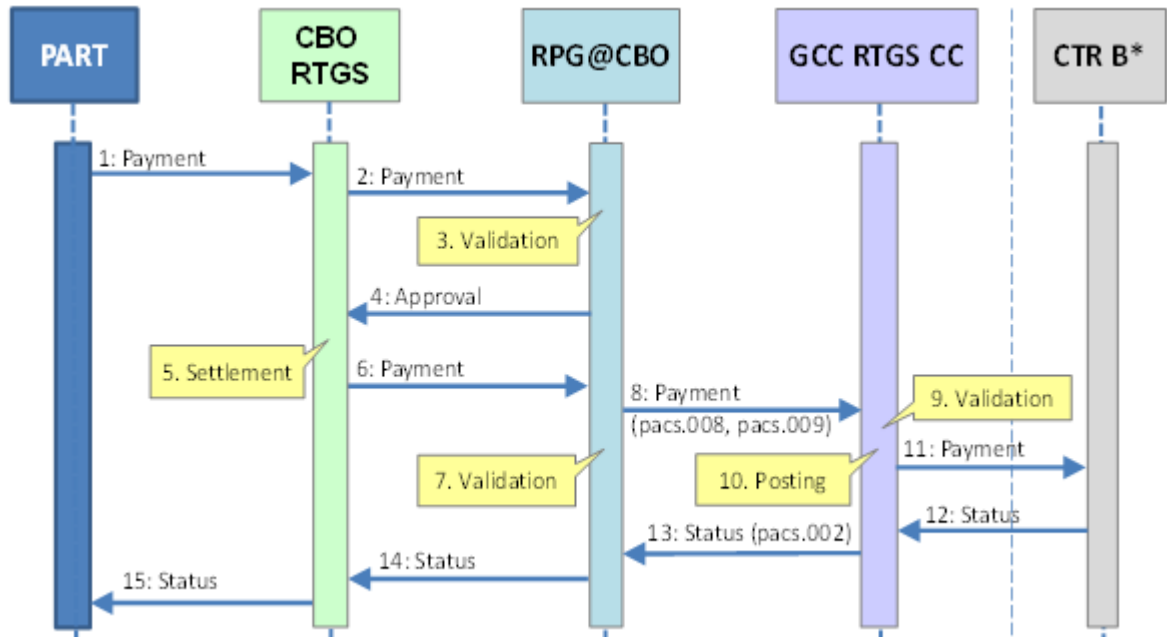
The applicable charges are detailed in the Fees & Charges section.

The participant bank is expected to initiate a return payment not later than 2 business days (governed by GPC rules) with the same FX rate that of the incoming payment. After 2 business days the return payment cannot be accepted by the GCC system. For more details refer to GPC_AFAQ_Return Rules and Regulations Addendum.

15.2. Processing outward payments from Omani Participant

Note*: CTR B (country B) is a simplified entity that includes in the schemes below: the RPG, the Domestic RTGS system of receiving NCB and receiving bank (participant).

The general scheme of processing outward cross-currency payment from CBO RTGS is explained below:



Processing scheme description

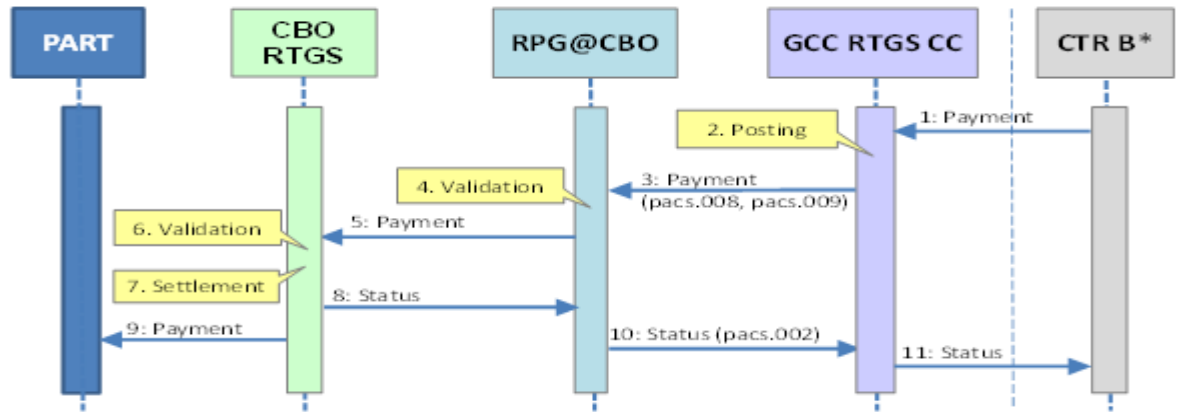
##	Description
1	Omani bank (PARTICIPANT) sends multi-currency cross-border payment in OMR to the CBO RTGS system.
2	The CBO RTGS system routes the payment as authorization request to the Regional Payment Gateway (RPG@CBO). Note*. Future value dated payments are not allowed at GCC RTGS level for cross-currency mode due to non-predictable tentative FX rate change.
3	The RPG validates the payment

#	Description
4	The RPG sends positive authorization reply (MT198 or MT298) to the CBO RTGS system
5	The CBO RTGS system debits account of local bank and credits account of the NCB of Country B in OMR
6	The CBO RTGS system sends copy of the payment (MT103 or MT202) to the Regional Payment Gateway.
7	The RPG validates the payment again
8	In case of successful validation, the RPG transforms the original MT payment message to MX format and then sends the payment in MX format (pacs.008, pacs.009) for the processing to the GCC RTGS CC. Transformation includes re-addressing the message and transforming certain fields according to the transformation rules.
9	GCC RTGS CC validates the payment
10	GCC RTGS CC performs two entries: Entry in OMR: Dr: Technical account Cr: Mirror account of the NCB of Country B. Entry in currency of Country B Dr: Mirror account of CBO. Cr: Technical account
11	The payment message in receiver's currency is delivered to the RPG of the receiving NCB. The RPG transforms the messages to MT format and sends to the Domestic RTGS system for settlement
12	Country B processes the payment and informs GCC RTGS CC on successful settlement by sending the status message through the RPG of its country.
13	The GCC RTGS CC informs sender's RPG (RPG@CBO) on successful settlement (pacs.002)
14	The RPG sends transformed status message (MT198 or MT298) to the CBO RTGS system

15.3. Processing inward payments from the GCC RTGS to Oman

Note*: CTR B (Country B) is a simplified entity that includes in the schemes below: the RPG, the Domestic RTGS system of sending NCB and sending bank (participant).

The general scheme of processing inward multi-currency cross-border payment from GCC RTGS is explained below:



Processing scheme description

##	Description
1	CTR B sends multi-currency cross-border payment in own currency to the GCC RTGS CC via own RPG
2	GCC RTGS CC performs two entries: Entry in OMR: Dr: Mirror account of the NCB of Country B. Cr: Technical account Entry in currency of Country B (other than SAR): Dr: Technical account. Cr: Mirror account of CBO.
3	The payment message in OMR is delivered to the Regional Payment Gateway at Oman
4	The RPG validates the payment
5	The RPG sends the payment for settlement to the CBO RTGS system
6	The CBO RTGS system validates the payment
7	The CBO RTGS system debits account of the NCB of Country B and credits account of Omani bank in OMR
8	The CBO RTGS system informs the RPG on successful settlement
9	The CBO RTGS system informs receiving bank on crediting its account
10	The RPG sends status of received payment to the GCC RTGS CC
11	The GCC RTGS CC sends status of payment to sending country (CTR B).

If the receiving Direct Participant is unable to complete the payment for any reason, they should return it to the Sending Direct Participant as soon as possible, preferably within the same business day. If the payment cannot be returned on the same business day, it should be returned before the cut-off time for that type of payment on the next business day or within 2 business days at the latest.

When a Direct Participant is returning a payment, they must use the same exchange rate and currency amount as in the original payment, with no deductions.

This rule applies even if the payment is being returned on the next or subsequent business day regardless of whether the Confirmed Exchange Rate between the two currencies has changed. Any payment being returned must be returned as a single message.

15.4. Participants GCC specific payments validation

To process GCC RTGS payments the following validation/process must be followed on participant's side:

- Correctly fill in the fields for GCC payments, including exchange rate information (according to current FX Rate published in the RPG portal); the approved FX rate for the day can be found on RPG GUI (WBPP) and is available via a dedicated API. Any payment message with incorrect exchange rate will be rejected.
- Customer credit transfer to UAE must have proper purpose code. Sender of a transfers from Oman must add the proper code according to CBUAE specification (to be provided by GPC in scope of GCC RTGS project). The dedicated codes for UAE payments must be indicated in the field 77B for MT103.

15.5. Currency conversions

Participating banks sending AFAQ cross-currency payments should be equipped to calculate the equivalent amount from the amount instructed by their customer, be that expressed as the amount to send in local currency of the amount they wish the beneficiary to receive in the other currency.

In the AFAQ cross-currency service, the 2 scenarios will use different formulas:

- If the customer instructs the payment as a specified amount in the local sending currency, then the equivalent receive amount is calculated from the pay amount as:
 - **Tag 33B=Tag32A/Tag 36**
- If the customer instructs the payment as a specific amount in the receive currency, then the equivalent send (pay) amount is calculated from the receive amount as:
 - **Tag 32A=Tag33B*Tag 36**

Where tag 32A is the settlement amount in local currency, 33B is the equivalent amount in the receive currency and 36 is the exchange rate as used in the FIN MT103 message format.

In both cases, the exchange rate applied is the agreed daily cross-currency rate of the receiving currency to the sending currency, and the result is rounded “five-up” to the number of decimal places of that currency.

It is noted that:

- The rate quoted in Tag 36 of an incoming MT103 from the AFAQ service at the receiving side will be the reciprocal rate of that, which was used on the sending side to determine the equivalent amount. That is the tag 36 value will be the agreed daily cross-currency rate of the sending currency to the receiving currency.
- The calculation does not include charges. For the AFAQ cross-currency service, supplying receiver's charges in Tag71B is discouraged; and sender's charges in Tag 71F are for information only.



16. Appendix I: RTGS Participants

Bank Name	BIC
Direct Participants	
AIAHLI BANK	AUBOOMRU
BANK OF BEIRUT	BABEOMRX
BANK OF BARODA	BARBOMMX
HSBC BANK OMAN	BBMEOMRX
BANK DHOFAR	BDOFOMRU
BANK MUSCAT	BMUSOMRX
BANK SOHAR	BSHROMRU
BANK OF SADERAT IRAN	BSIROMRXXXXX
HABIB BANK OMAN	HABBOMRX
BANK MELLI IRAN	MELIOMRX
CENTRAL BANK OF OMAN	CBOMOMRU
FIRST ABU DHABI BANK	NBADOMRX
NATIONAL BANK OF OMAN	NBOMOMRXXXX
OMAN DEVELOPMENT BANK	ODBLOMRX
OMAN HOUSING BANK	OHBLOMRX
OMAN ARAB BANK	OMABOMRU
QATAR NATIONAL BANK	QNBAOMRX
STATE BANK OF INDIA, MUSCAT	SBINOMRX
STANDARD CHARTERED BANK	SCBLOMRX
MINISTRY OF FINANCE	MINIOMRU
MUSCAT CLEARING AND DEPOSITORY CO	MCDCOMR2
Direct Participants ISLAMIC BANKS	
AL AHLI ISLAMIC WINDOW AL HILAL	AUBOOMRUALH
MAISARAH ISLAMIC BANKING SERVICES	BDOFOMRUMIB
BMCT ISLAMIC BANKING WINDOW MEETHAQ	BMUSOMRXISL
NBO MUZUN ISLAMIC BANKING	NBOMOMRXIBS
BANK SOHAR ISLAMIC WINDOW	BSHROMRUISL
AIIZZ ISLAMIC BANK	IZZBOMRU
BANK NIZWA	BNZWOMRX
Indirect Participants	
UAE CENTRAL BANK	CBAUAEAAXXX
CENTRAL BANK OF KUWAIT	CBKUKWKWXXX
CENTRAL BANK OF THE ISLAMIC REPUBLIC IRAN	CBIRIRANXXX



GCC-SWITCH ACCOUNTS	
CBB SWITCH ACCOUNT	CBBSWTCHXXX
CBK SWITCH ACCOUNT	CBKSWTCHXXX
QCB SWITCH ACCOUNT	QCBSWTCHXXX
SAMA SWITCH ACCOUNT	SAMSWTCHXXX
UAE SWITCH ACCOUNT	UAESOMRUXXX
OMAN-NET SWITCH WITH GCC	
BENEFIT ACCT-BAHRAIN	OMNETBAHXXX
K-NET ACCT-KUWAIT	OMNETKUWXXX
NAPS ACCT-QATAR	OMNETQATXXX
SPAN ACCT-SAUDI ARABIA	OMNETSADXXX
UAE SWITCH ACCT-UAE	OMNETUAEXXX
Central Bank Departments	
Accounts & Procurement Department	CBOMOMRUAFID
Accounts & Procurement Department	CBOMOMRUACC
Market Operations Department	CBOMOMRUTMD
Currency Management Department	CBOMOMRUCUR
Pay & Benefits Department	CBOMOMRUHRD
International Settlements Department	CBOMOMRUISD
CBO Payment Systems Department	
RTGS System	CBOMOMRURTG
ACH System Interface	CBOMOMRUCLH
ECC System Interface Adapter 1	CBOMOMRUAP1
ATM OMAN NET	ONETOMRUFEE
MPClear System Interface	CBOMOMRUMPC
DMS System Interface	DMSMOMRX
Central Bank Branches	
CBO Salalah Branch	CBOMOMRUSAL
CBO Sohar Branch	CBOMOMRUSOH

Note: The above list will have additional accounts of GCC National central Banks related to the AFAQ payment service, the same would be updated in the next version.

17. Appendix II: RTGS Technical Details

CBO RTGS is a solution which provides functionality of the real-time gross settlement system: functionality where payment instructions of participants are processed and settled continuously on an individual basis. This system is designed to provide settlement services for large value and/or high priority payments of participants, including operations of the CBO itself, to complete settlements in the external clearing and settlement systems.

- The telecommunication environment allows secured message sending and receiving.
- The system has a built-in support of ISO20022 messages as well as MT message formats as well.
- The system can work with IBAN as well as with non IBAN accounts.
- The proposed solution itself, its development and implementation process are compliant with the following standards and certification programs:
 - CPSS/IOSCO guiding principles and recommendations;
 - ISO/IEC 27001 and 27002 Information Security Management System standard;
 - ISO 22301 — Societal security — Business continuity management systems – Requirements;
 - ISO 9001:2000 certification for “Provision of information technology consulting services”;
 - SWIFT Certified Application Payments 2004-2018.
- The integration of RTGS with the information systems of the CBO are performed on STP principles.
- RTGS system for CBO is 24x7 system with periodic short maintenance periods (weekly for 10 minutes). Short periodic maintenance time window is required for:
 - Applying patches.
 - Doing logs rotation.
 - Refreshing memory buffers (etc).

17.1. Transmission of Messages

The dedicated network “BankNet” will be used for communication and transfer of payment messages between the participants and the Central Bank.

17.2. Security – Encryption and Authentication

The RTGS system supports Public Key Infrastructure (PKI) based digital signatures when exchanging messages. The PKI server provides functions of message signing, checking message signature, message encryption and decryption. The communication between the two servers or nodes of the RTGS system are digitally signed with the server certificates.

Every user shall have login & password and a digital signature generated based on his/her personal certificate. The login process authenticates these credentials and access to the different modules/functions of the RTGS system will be granted based on the access rights of the user (in terms of type of actions he/she is entitled to, accounts he/she may access, type of messages and data).

Information Security department of CBO will issue and maintain circular with detailed process and procedure related to the PKI management for.

17.2.1. Portal Access to the system by the participants

The participant will use portal access, which provides:

- WEB-based GUI interface for participants;
- Provides advanced Monitoring, Dashboards and Reporting facilities.
- Payments processing (Conditional)

17.2.2. Message interface

Message Standard:

MX (Recommended)

MT (compatible with exist message format)

Interface Option (with centralized Conversation):

STPG [CBO Recommended] –Straight-Through Processing Gateway supports following interfaces with Participant CBS system (CBO recommended method):

- REST-based WEB-services.

STPA [For backward compatibility] - Straight-Through Processing Adapter supports following interfaces with Participant CBS system:

- SOAP-based WEB-services
- File exchange
- Message queues (MQ).

The details of connecting interfaces are described in dedicated documents:

CBO RTGS STP Adaptors specification centralized format conversion;

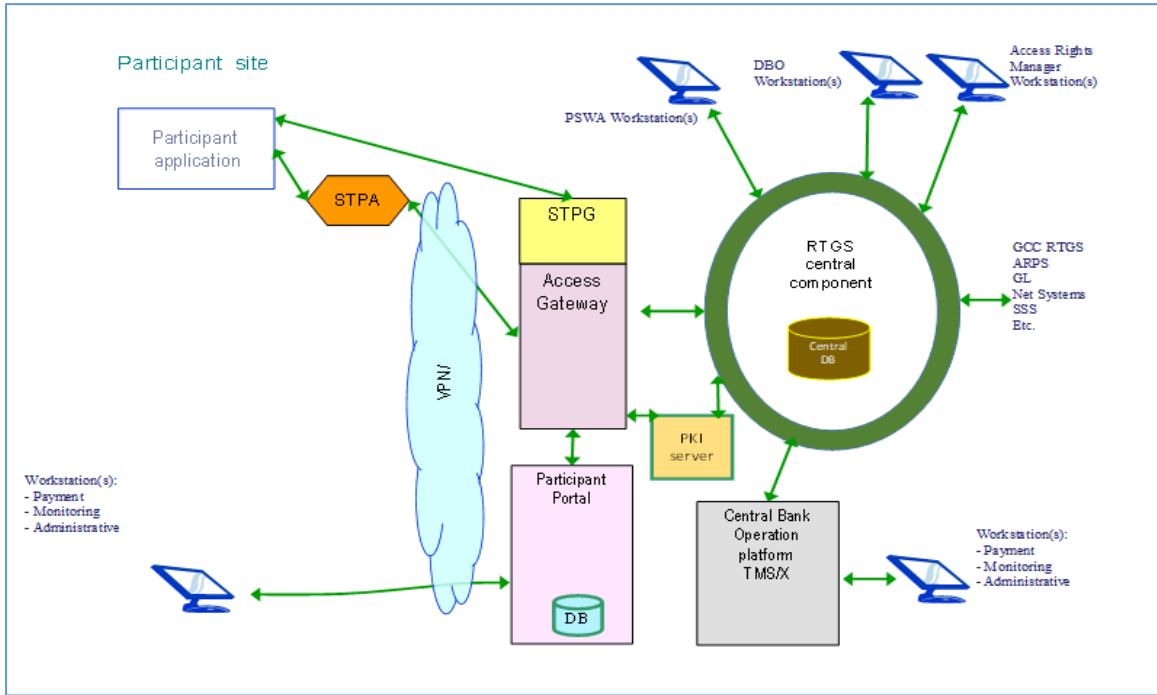
CBO RTGS STP-A File Adapter with Centralized conversion User Guide;
CBO RTGS STP-A MQ-mode with Centralized conversion User Guide;
CBO RTGS STP-A SOAP API with Centralized conversion User Guide;
CBO RTGS STP-G with Centralized built-in Message Conversion specification.

17.2.3. RTGS Component scheme

The major components that compose the functional architecture of RTGS are:

RTGS Central Node is composed of the following modules:

- RTGS Application server (or RTGS core), provides the functionality of RTGS and other related functions.
- RTGS Access server (or RTS/X Access Gateway) provided the gateway for participants integrations
- RTS/X Database is for the central data storage use Oracle Database Management System.
- CBO Portal (TMS/X) for CBO department access with its own database schemes in central database server
- Participant portal (TMS/X) for participant access with its own database schemes in central database server
- CBO PKI server issues digital certificates and RTS/X uses these digital certificates for message signing, checking message signature (with public key and CRL published in CBO LDAP) , message encryption and decryption.
- BankNet is a private network communication setup provided to RTGS participant community, that provides the exchange between the RTS/X (RTGS central node) and participants platforms securely. Participant portal (TMS/X server -Transaction Management System) provides the possibility for participants using workstations with web interface in exceptional situations; TMS/X server has its own database scheme in RTS/X Database.
- Communication networks; participants, different RTS/X workstations which perform access to the RTS/X Central Node using different interfaces.



17.3. Message Format

17.3.1. Message Formats

The message format shall support MT and MX SWIFT corresponding to ISO 20022 V-shape topology. SWIFT BIC code (11 characters or 8 characters for HQs) should be adopted as a unique identification code of the participants. The SWIFT BIC comprises an 8-character bank code and a 3-character branch code. There are a few participants which are not yet S.W.I.F.T members. As such, a SWIFT compatible BIC shall be adopted for these participants.

For those participants who are not SWIFT members, they should inform the Central Bank Payment Systems Department in case they have applied for a new SWIFT BIC code and become a SWIFT member in future. Payment Systems Department of the Central Bank will re-configure the participant information in the RTGS and advise all participants of any change.

#	Message type (MX ISO 20022)	MT Equivalent	Description	To/From whom may be sent
	head.00 1.001.02	x	Application header	Participant -> RTGS -> Participant



#	Message type (MX ISO 20022)	MT Equivalent	Description	To/From whom may be sent
	admi.002 .001.01	MT996/RJCT	Message that is sent by a central system to a participant of the central system to notify the rejection of a message previously received from the participant (error in format)	RTGS →Participant;
	camt.00 9.001.07	MT199	Get Limit	Participant → RTGS
	camt.01 0.001.08	MT199	Return Limit	RTGS → Participant
	camt.01 1.001.07	MT199	Modify Limit	Participant → RTGS
	camt.01 8.001.07	MT999/GSCD	Request Business Day timetable or template	Participant → RTGS
	camt.01 9.001.07	MT999/SCDW	Day timetable change notification	RTGS →Participant
	camt.02 5.001.05	MTn96	Receipt information about the processing of the original message	RTGS → Participant
	camt.02 9.001.10	MTn96/CAN C MTn96/PRTY	Cancellation answer message Change priority answer message	RTGS →Participant; RTGS →CBO
	camt.04 8.001.05	x	Set liquidity saving limit for priority group	Participant → RTGS
	camt.05 0.001.05	MT200	Liquidity Credit Transfer	Participant → RTGS → Participant
	camt.05 1.001.05	MT200	Liquidity Debit Transfer	Participant → RTGS → Participant
	camt.05 2.001.08	MT941	Account report, Balance report and Interim transaction report that is	RTGS →Participant; RTGS →CBO



#	Message type (MX ISO 20022)	MT Equivalent	Description	To/From whom may be sent
			generated by related request	
	camt.05 2.001.08	MT999/ASTS MT986/STAT	Account status notification Account status report	RTGS →Participant; RTGS →CBO
	camt.05 2.001.08	MT942	Interim transaction report	RTGS →Participant; RTGS →CBO
	camt.05 3.001.08	MT950 MT940	Statement message Customer Statement message	RTGS →Participant; RTGS →CBO
	camt.05 4.001.08	MT910	Credit confirmation. Confirms crediting of an account when related transfer is settled using RTGS service.	RTGS →Participant, RTGS →CBO
	camt.05 4.001.08	MT900	Debit confirmation. Confirms debiting of an account when related transfer is settled using RTGS service.	RTGS →Participant, RTGS →CBO
	camt.05 6.001.09	MTn92	Request for the cancellation of non-settled transfer previously sent to the system	Participant→RTGS ; CBO→RTGS
	camt.06 0.001.05	MT920/941 MT985/STAT	Request for interim transaction report Account status request	Participant→RTGS ; CBO→RTGS
	camt.08 7.001.07	MTn95/PRTY	Change priority of the non- settled transfer	Participant→RTGS ; CBO→RTGS
	camt.99 8.001.03	MT999/ TEXT MT199/ TEXTMESSAG E	Text message P -> P Text message BSP -> P broadcast	Participant→RTGS →Participant; Participant→RTGS →CBO;



#	Message type (MX ISO 20022)	MT Equivalent	Description	To/From whom may be sent
				CBO→RTGS →Participant
	camt.99 8.001.03	MT999/TEXT	Received text message, including transaction message, other types of service messages	Participant CBO->RTGS
	camt.99 8.001.03	MT999/MPST	Change participant status	CBO→RTGS
	camt.99 8.001.03	MT999/PSTS	Participant status notification	RTGS →Participant, RTGS →CBO
	camt.99 8.001.03	MT999/LCKA	Lock account	CBO→RTGS
	camt.99 8.001.03	MT999/ULKA	Unlock account	CBO→RTGS
	pacs.002 .001.11	MTn96/STAT MTn96/ERRC MTn98/996 MT598 MT298 (207) MT298 (296)	Payment status notification GCC payment status message	RTGS →Participant; RTGS →CBO
	pacs.002 .001.11	MTn95	Customer delivery report	Participant -> RTGS
	pacs.004 .001.10	MT202	Return transfer	Participant CBO→RTGS , RTGS →Participant CBO
	pacs.008 .001.09	MT103	Credit transfer (Single customer payment transfer)	Participant CBO→RTGS →Participant CBO
	pacs.008 .001.09	MT102	Multiple Customer Credit Transfer. ³	Participant CBO→RTGS , RTGS



#	Message type (MX ISO 20022)	MT Equivalent	Description	To/From whom may be sent
				→Participant CBO (Copy)
	pac.009 .001.09	MT971	Clearing results or notification for Participant having no enough funds to cover their Net Debit position in netting statements coming from external clearing systems for settlement.	Participant CBO→RTGS →Participant CBO
	pac.009 .001.09	MT202	General Financial Institution transfer (conventional) General Financial Institution transfer (cover)	Participant CBO→RTGS →Participant CBO
	pac.028 .001.04	MTn95/STAT	Request for a Payment status	Participant CBO→RTGS

Note: The participants should follow CBO new RTGS - Message format document Version 1.1, please note CBO will publish revised version of this interface specification from time to time.

17.3.2. Unique key of transfers

The following group of fields uniquely identifies each request:

- Reference of request message;
- Participant's BIC, identifying the sender of request;
- Current business day.

In case of erroneous request, it should be corrected by the participant, and then resent with another reference of request.

17.3.3. Unique key of requests

The following group of fields uniquely identifies each request:

³ The message will be processed as single transfer. Separate payments of transfer will not be processed individually, but it would be possible to view them in monitoring workstations.

- Reference of request (Field: 20 :)
- Participant's BIC, identifying the issuer of request;
- Current business day.

In case of erroneous request, it should be corrected by the participant, and then resent with another reference of request.

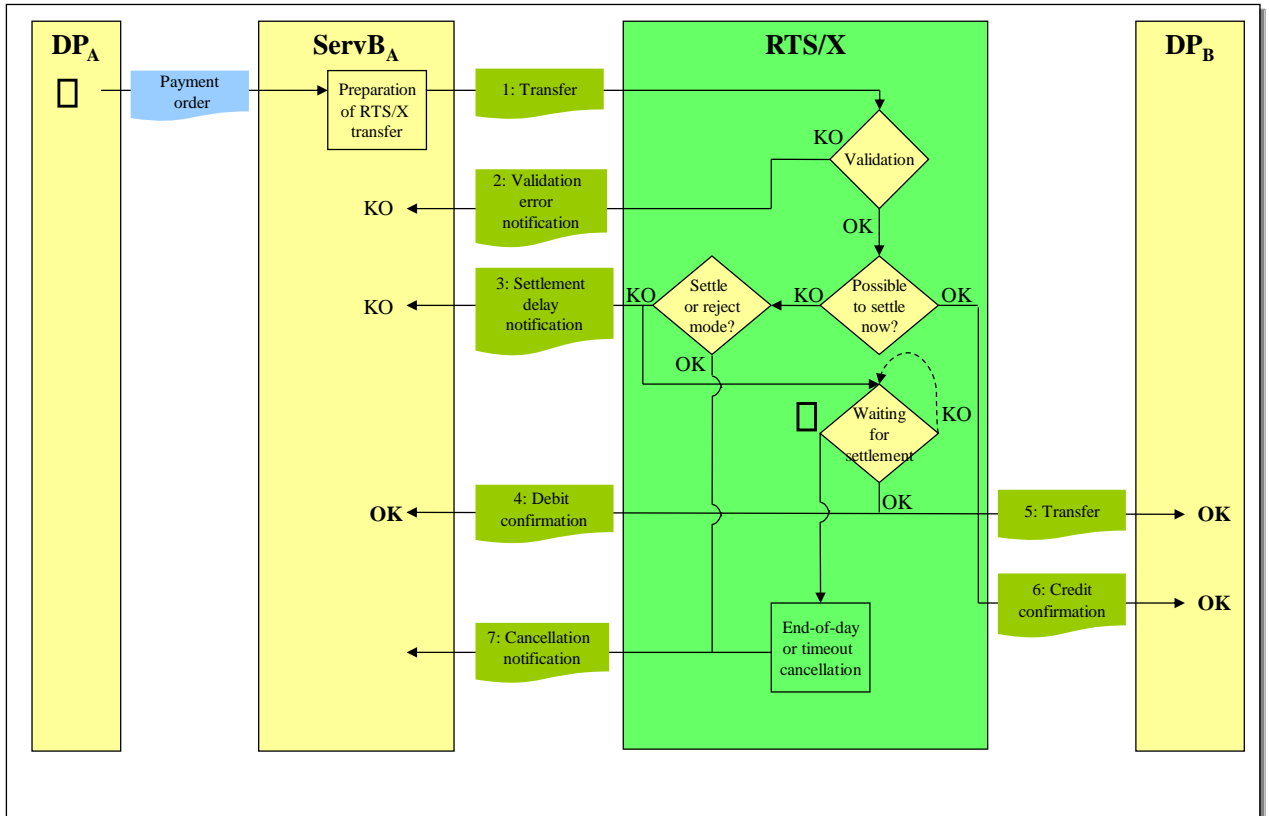
17.4. Network Availability

The platform of the participants and the RTGS central server are connected via a dedicated network "BankNet" for communication and transfer of messages. The total availability of the RTGS system depends on the availability of every link of network, up and running central server and the participant platform.

The Central Bank shall setup a Service Bureau to provide the shared access to the RTGS system for the participants as a contingency measure to handle the non-availability of RTGS service at participants side (due to BankNet, system or network issues). The Service Bureau may be organized at the CBO premises or any other suitable building with computers that are connected to RTGS system via BankNet or LAN or otherwise. This Service Bureau is an RTGS technical participant, which has rights to send messages created by other participants and receive messages from RTGS system to deliver them to those participants.

Participant should physically send signed payment message files using its own user digital certificates through an authorized person to CBO premises (Service Bureau). These RTGS transactions then shall be processed through software setup at the Service Bureau.

Participant should take prior permission from CBO PSD to use to access Service Bureau and process transactions in the presence of employee from concern CBO department.



Direct Participant A's authorized person present at CBO premises with digitally signed payment message files (In MT or MX formats) in a physical storage to send these payments to RTS/X through Service Bureau. Transaction process through Service Bureau debits Direct Participant A's settlement account (SA) in RTGS. Direct Participant B receives the payment transfer and credit confirmation on it SA as expected. Provision will be available to manually enter the payment using RTGS portal using respective participant bank's user (with relevant 2nd factor authentication).

18. Appendix III: Glossary of Terms

Term	Definition
ACK/NAK	This message confirms that the system has received a message from a participant and that the system has accepted (ACK) or rejected (NAK) the message.
Administrator/System Administrator	A user role established in the RTGS with responsibility to perform all daily maintenance of system parameters, participant /user/account information, business rules in order to suit operational requirements of the RTGS participants.
Automated Buy-Back (REPO Rollover)	The period in which the system generates reports on settlement accounts of the participants that are outstanding i.e. not bought back. Also refer to Section 3.2 under Description of the periods of a Business Day
Available balance	The balance of a settlement account which is available for use by a debit instruction, and in which the amount blocked by queued payment has already been excluded.
Available funds	Funds available for transfer or withdrawal in cash.
Bank identifier code (BIC)	A universal method of identifying financial institutions in order to facilitate the automated processing of telecommunication messages in financial environments.
Banking Law	The banking Law issued by the Royal Decree 114/2000.
BankNet	A computer data communication network in Oman, which adopts the Multi-Packet Label Switching (MPLS) technology. The BankNet is operated by Omantel and it provides services of sending/receiving multimedia information electronically amongst the subscribers.
Business Cycle	Refer to Rule 3 Section 3.1
Cancellation/cancelled	A mechanism whereby some or all transfers to/from a participant are excluded from the settlement process, effected at the instruction issued by either the sending participant, or authorized personnel of the RTGS system operator.
Central Bank / CBO	The Central Bank of Oman

Term	Definition
Clearing house	This refers to the existing Clearing House Section of CBO, which is responsible for clearing and settlement of cheque, ATM and various Government transactions in the Sultanate of Oman.
Clearing system	A set of procedures whereby financial institutions present and exchange data and/or documents relating to funds or transfers to other financial institutions at a single location (clearing house).
Clearing/clearance	The process of transmitting, reconciling and, in some cases, confirming payment orders or security transfer instructions prior to settlement, possibly including the netting of instructions and the establishment of final positions for settlement.
Collateral	An asset that is delivered by the collateral provider to secure an obligation to the collateral taker. Collateral arrangements may take different legal forms; collateral may be obtained using the method of title transfer or pledge.
Credit transfer	A payment order or possibly a sequence of payment orders made for the purpose of placing funds at the disposal of the beneficiary. Both the payment instructions and the funds described therein move from the bank of the payer/originator to the bank of the beneficiary, possibly via several other banks as intermediaries and/or more than one credit transfer system.
Customer	A natural or legal person, on whose behalf (ordering customer) or in whose favour (beneficiary customer), a payment is affected.
Customer payment	A payment where the originator or the final beneficiary, or both, are not financial institutions.
Daily processing	The complete cycle of payment settlement processing tasks, which needs to be completed in a typical business day, from start-of-day procedures to end-of-day procedures, including the backing-up of data.
Daily settlement	Completion of settlement on the day of value of all payments accepted for settlement.



Term	Definition
Default	Failure to complete a funds or securities transfer according to its terms for reasons that are not technical or temporary, usually as a result of bankruptcy. Default is usually distinguished from a "failed transaction".
Deletion	A mechanism whereby some or all transfers to/from a defaulting participant are excluded from the settlement process. In a netting scheme, other participants' bilateral and/or multilateral net positions are recalculated. See also <i>unwinding</i> .
Delivery versus payment (DvP)	A link between a securities transfer system and a funds transfer system that ensures that delivery occurs if, and only if, payment occurs.
Depository	An agent with the primary role of recording securities either physically or electronically and keeping records of the ownership of these securities.
Digital signature	A string of data generated by a cryptographic method that is attached to a message to ensure its authenticity as well as to protect the recipient against repudiation by the sender.
Direct participant	A participant who is responsible to the settlement agent (Central Bank of Oman) for the settlement of its own payments, those of its customers, The participant has direct physical connection and settlement account in the RTGS system.
Encryption	The use of cryptographic algorithms to encode clear text data (plaintext) into cipher text to prevent unauthorized observation.
Exchange Period for Interbank Payments	The period in which the participants can only exchange interbanks payments i.e. MT 202. Also refer to Rule 3.2 under Description of the periods of a Business Day
Exchange Periods for Customer and Interbank Payments (Including Repo)	The periods in which the participants can exchange their interbank transfers and transfers of their customers and enter into Repo transaction. Also refer to Section 3.2 under Description of the periods of a Business Day
Exchange Periods for Customers and Interbank	The periods in which the participants can exchange their interbank transfers and transfers of their customers but cannot request a Repo. Also refer to



Term	Definition
Payments (Excluding Repo)	Section 3.2 under Description of the periods of a Business Day
Failed transaction	A transaction, which does not settle on the contractual settlement date.
Field	<p>A data element(s) for which the identification, description and value representation has been predefined. Each data element constitutes an indivisible unit. Where a field consists of more than one data element, each forms a subfield.</p> <p>Fields may be:</p> <ul style="list-style-type: none">. Fixed length or variable length. Mandatory or optional. Restricted in the characters that may be used. <p>A field can appear only once in a message, unless the rules specify otherwise. Some fields consist of several subfields</p>
Final	Irrevocable and unconditional.
Final settlement	Settlement, which is irrevocable and unconditional. The discharge of an obligation by a transfer of funds that have become irrevocable and unconditional.
Finality	Settlements in payment systems, which are both unconditional and irrevocable, are designated as final.
Financial institution	An organization primarily established to offer and perform services specifically related to the provision of financial (monetary) services.
Financial liability	Any liability that is a legal obligation to deliver cash or another financial instrument to another enterprise or to exchange financial instruments with another enterprise under conditions that are potentially unfavourable.
Format	The rules of layout, e. g, for a message type or field within a message type.
Format checking	<p>That part of the processing which checks that a message format conforms to the message type rules. The checks include, among others:</p> <ul style="list-style-type: none">presence of mandatory fieldsabsence of forbidden fieldsfield length restrictionscharacter restrictions

Term	Definition
General Ledger	This refers to the General Ledger Accounting system of Central Bank in which the participants settlement accounts are maintained as a sub-ledger.
Gridlock	A situation that can arise in the RTGS in which the failure of some transfers instructions to be executed (because the necessary funds or securities balances are unavailable) prevents a substantial number of other instructions from other participants from being executed. See also <i>Failed transaction, queuing, and systemic risk</i> .
Indirect participant	Indirect participants are distinguished from direct participants by their inability to perform some of the system activities (e.g. inputting of transfer orders, settlement) performed by direct participants. Indirect participants thus require the services of direct participants to perform those activities on their behalf. In RTGS context the term refers more specifically to participants in a transfer system which are responsible only to their direct participants for settling the payments input into the system (see also <i>direct participant</i>)).
Intraday liquidity	Funds that can be accessed during the business day, usually to enable financial institutions to make payments in real time.
Key	A unique series of digits used in combination with a cryptographic algorithm.
Key length	The number of bits comprising an encryption key.
Key management	The design of the life cycle of keys and the relationships between keys, which are used in a computer system for cryptographic purposes. Alternatively, when referring to a system in operation, the processes by which cryptographic keys used in a computer system are generated, stored and updated.
Liability	A present obligation of the enterprise arising from past events, the settlement of which is expected to result in an outflow from the enterprise of resources embodying economic benefits.
Monetary Operations Domain	An entity in the RTGS system, which is responsible for processing the request of intraday and overnight

Term	Definition
	liquidity request from participants. It validates the participant request and authorizes injection of liquidity to the settlement account of the participant such that the participant's payment can be settled timely and mobility of funds is maintained in the RTGS system. In the operating environment of CBO RTGS system, Treasury Market Operations Department (TMOD) of CBO is assigned the role of the Monetary Operations Domain.
Liquidity risk	The risk that a counter party (or participant in a settlement system) will not settle an obligation for full value when due. Liquidity risk does not imply that a counter party or participant is insolvent since it may be able to settle the required debit obligations at some unspecified time thereafter.
MCDC	Muscat Clearing and Depository Company
Message type (MT)	The specification of each S.W.I.F.T. message by a three-digit number showing the major area (category), the function (group), and the specific details (format). There is a set of rules for each message type.
National Payment Systems Law (NPSL)	The National Payment Systems Law No. 8/2018
Net credit (or net debit) position	A participant's net credit or net debit position in a netting system is the sum of the value of all the transfers it has received up to a particular point in time less the value of all transfers it has sent. If the difference is positive, the participant is in a net credit position; if the difference is negative, the participant is in a net debit position. The net credit or net debit position at settlement time is called the net settlement position. These net positions may be calculated on a bilateral or multilateral basis (see also <i>net settlement, settlement system</i>).
Net settlement	The settlement of a number of obligations or transfers between or among counterparties on a net basis. See also <i>Netting</i> .
Netting	An agreed setoff of mutual positions or liabilities between business partners or participants in a payment system. Netting reduces a large number of

Term	Definition
	individual positions or liabilities to a smaller number of positions or liabilities. Netting can take different forms; these claims are legally enforceable to a varying extent in case of default by a participant.
Obligation	A duty imposed by contract or law.
Participant	A party that participate in the settlement activities operated by the RTGS system. See also <i>Direct Participant, Indirect Participant</i> .
Payment	The payer's transfer of a monetary claim on a party acceptable to the payee. Typically, claims take the form of banknotes or deposit balances held at payee's bank.
Payment instrument	Any instrument enabling the holder/user to transfer funds.
Payment message/instruction/order	An order or message to transfer funds (in the form of a monetary claim on a party) to the account of the beneficiary. The order may relate either to a credit transfer or to a debit transfer.
Payment system	A payment system consists of a set of instruments, banking procedures and, typically, interbank funds transfer systems that ensure the circulation of money.
Protocol	Procedures for the interchange of electronic messages between communicating devices.
Queuing	A risk management arrangement whereby transfer orders are held pending by the originator/deliverer or by the system until sufficient cover is available in the originator's/deliverer's clearing account or under the limits set against the payer; in some cases, cover may include unused credit lines or available collateral.
Receiver	The participant receiving a message as identified by its registered address in the header of the message.
Reference Documents	Refer to Rule 1 Section 1.8
Repurchase agreement	An agreement with a commitment by the seller to buy a security back from the purchaser at a specified price at a designated future date. Also called a <i>repo</i> .
Request	Message sent to RTGS to receive answer on status of the transfer, account, etc. Text messages in RTGS are also process as requests.

Term	Definition
RTGS	Real Time Gross Settlement System
RTGS Payment System/RTGS	Refer to Rule 1 Section 1.2
S.W.I.F.T.	Society for Worldwide Interbank Financial Telecommunication: a cooperative organization created and owned by banks that operates a network which facilitates the exchange of payment and other financial messages between financial institutions (including broker-dealers and securities companies) throughout the world. A S.W.I.F.T. payment message is an instruction to transfer funds; the exchange of funds (settlement) subsequently takes place over a payment system or through correspondent banking relationships.
Sender	The party sending a message as identified by its registered address in the header of the message.
Sending bank	See <i>Sender</i> .
Sequence number	A number attributed sequentially to a message and attached to it to prevent the duplication or loss of messages.
Server	A computer that provides services through a network to other computers.
Service bureau	A type of institution type which is defined in RTGS system to offer services of sending/receiving payment orders on behalf of participants that have temporarily lost electronic delivery channel to the RTGS system.
Session key	A cryptographic key, which is used for a limited time, such as a single communication session or transaction, then discarded.
Settlement	The actual fulfilment of the payment order, i.e. the transfer of the payment from the sender bank to the receiver bank is called settlement. This transfer is carried out via a central counterparty. It releases the debtor from payment obligation.
Settlement account	An account held by a direct participant in a CBO RTGS system for the purpose of processing payments.
Settlement date	The date on which the parties to funds transfer transaction agree that settlement is to take place.



Term	Definition
	The intended date is sometimes referred to as the contractual settlement date.
Settlement risk	A general term used to designate the risk that settlement in a transfer system will not take place as expected. This risk may comprise both credit and liquidity risks. No such definitions in Glossary.
Settlement system	A system used to facilitate the settlement of transfers of funds or financial instruments.
Subfield	A data element, which constitutes the smallest indivisible unit within a field consisting of more than one data element. A group of two or more subfields constitutes a field.
Systemic risk	The risk that the failure of one participant in a transfer system, or in financial markets generally, to meet its required obligations will cause other participants or financial institutions to be unable to meet their obligations (including settlement obligations in a transfer system) when due. Such a failure may cause significant liquidity or credit problems and, as a result, might threaten the stability of financial markets.
Tag	A two digit identifier of a field, sometimes followed by a letter. It marks the presence and start of the field. A letter indicates the format option chosen for the field.
TCP/IP	Transmission control protocol/internet protocol: a set of commonly used communications and addressing protocols; TCP/IP is the facto set of communications standards of the internet.
Text (text block)	The part of a message, which is enclosed between the header and the trailer.
Text message	Free format message (MTn99). In RTGS text messages are also used for proprietary requests and reports.
Time stamp	A value inserted in a message to indicate the time at which the message was created.
Transaction Reference Number	This field specifies the reference assigned by the Sender to unambiguously identify the message.
Transfer	Operationally, the sending (or movement) of funds or securities or of a right relating to funds or securities from one party to another party by (i) conveyance

Term	Definition
	of physical instruments/money; (ii) accounting entries on the books of a financial intermediary; or (iii) accounting entries processed through a funds and/or securities transfer system. The act of transfer affects the legal rights of the transferor, transferee and possibly third parties in relation to the money balance, security or other financial instrument being transferred.
Unsettled Payment Cancellation	The period in which all unsettled payments, which are queued in the RTGS System, shall be automatically cancelled.
Value Date	Day on which a payment is due to be credited to the receiving participant in the payment system.
Value date	The date on which funds are at the disposal of the Receiver. No such definition.
XML	Extensive Markup Language, which is a standard for describing data information by computer application software in a way, which will facilitate exchange, or sharing of information between different computer systems. It is a formal recommendation from the World Wide Web Consortium (W3C), and is similar to the HTML language of Web pages. Like HTML. XML contains markup symbols to describe the contents of data information.

19. Appendix IV: Old & New account mapping

#	Old Account Code	BIC Code	New Oracle GL account
1	51001.CBIRI	CBIRIRAN	01-000-221009-OMR-00000-000-0000
2	51001.CBKWT	CBKUKWKW	01-000-221008-OMR-00000-000-0000
3	51001.UAE CB-RO	CBAUAEAA	01-000-221001-OMR-00000-000-0000
4	60000.AHB	ALLIOMRX	01-000-224001-OMR-14019-000-0000
5	60000.ALAHLIB	AUBOOMRU	01-000-224001-OMR-14020-000-0000



#	Old Account Code	BIC Code	New Oracle GL account
6	60000.BDAF	BDOFOMRU	01-000-224001-OMR-14024-000-0000
7	60000.BMCT	BMUSOMRX	01-000-224001-OMR-14025-000-0000
8	60000.BMCT.CBI	CBIRBMCT	01-000-224001-OMR-14025-219-0000
9	60000.BMI	MELIOMRX	01-000-224001-OMR-14026-000-0000
10	60000.BOB	BARBOMMX	01-000-224001-OMR-14028-000-0000
11	60000.BOBEIRUT	BABEOMRX	01-000-224001-OMR-14029-000-0000
12	60000.BSI	BSIROMRX	01-000-224001-OMR-14031-000-0000
13	60000.BSOHAR	BSHROMRU	01-000-224001-OMR-14032-000-0000
14	60000.HBL	HABBOMRX	01-000-224001-OMR-14014-000-0000
15	60000.HSBCBME	BBMEOMRX	01-000-224001-OMR-14036-000-0000
16	60000.NBADH	NBADOMRX	01-000-224001-OMR-14002-000-0000
17	60000.NBO	NBOMOMRX	01-000-224001-OMR-14003-000-0000
18	60000.OAB	OMABOMRU	01-000-224001-OMR-14004-000-0000
19	60000.ODB	ODBLOMRX	01-000-224001-OMR-14006-000-0000
20	60000.OHB	OHBLOMRX	01-000-224001-OMR-14007-000-0000
21	60000.QNB	QNBAOMRX	01-000-224001-OMR-14010-000-0000
22	60000.SBOI	SBINOMRX	01-000-224001-OMR-14011-000-0000
23	60000.SCB	SCBLOMRX	01-000-224001-OMR-14012-000-0000
24	60001.AHLIHILAL	AUBOOMRUALH	01-000-224101-OMR-14040-000-0000



#	Old Account Code	BIC Code	New Oracle GL account
2 5	60001.ALIZZ	IZZBOMRU	01-000-224101-OMR-14044-000-0000
2 6	60001.BDAFMAISARA H	BDOFOMRUMIB	01-000-224101-OMR-14041-000-0000
2 7	60001.BMCTMEETHAQ	BMUSOMRXISL	01-000-224101-OMR-14038-000-0000
2 8	60001.BNZW	BNZWOMRX	01-000-224101-OMR-14037-000-0000
2 9	60001.BSOHAR	BSHROMRUISL	01-000-224101-OMR-14042-000-0000
3 0	60001.NBOMUZN	NBOMOMRXIBS	01-000-224101-OMR-14039-000-0000
3 1	68000.MOF	MNIOMRU	01-000-232001-OMR-00000-000-0000
3 2	68510.MCDC	MCDCOMR2	01-000-232006-OMR-00000-000-0000
3 3	73000.SAL-CLG	CBOMOMRUSAL	01-000-266002-OMR-00000-000-0000
3 4	73001.SOH-CLG	CBOMOMRUSOH	01-000-266003-OMR-00000-000-0000
3 5	82000.UAESWITCH	UAESOMRU	01-000-264002-OMR-00000-000-0000
3 6	82001.CBK SWITCH	CBKSWTCH	01-000-264016-OMR-00000-000-0000
3 7	82002.CBB SWITCH	CBBSWTCH	01-000-264017-OMR-00000-000-0000
3 8	82003.QCB SWITCH	QCBSWTCH	01-000-264018-OMR-00000-000-0000
3 9	82004.SAMA SWITCH	SAMSWTCH	01-000-264019-OMR-00000-000-0000
4 0	86751.INC-OMAN NET CHRGs SUSP	ONETOMRUFEE	01-000-437022-OMR-00000-000-0000
4 1	86753.ACH-INC- CHRGs-SUSP	ACHMOMRX	01-000-437025-OMR-00000-000-0000
4 2	86755.DMS-INC- CHRGs-SUSP	DMSMOMRX	01-000-437026-OMR-00000-000-0000
4 3	86756.MPCSS-INC- CHRGs-SUSP	CBOMOMRUMPC	01-000-437027-OMR-00000-000-0000



#	Old Account Code	BIC Code	New Oracle GL account
4 4	90100.CURRENCY	CBOMOMRUCUR	01-000-910008-OMR-95001-000-0000
4 5	90101.FOREX	CBOMOMRU	01-000-910008-OMR-95004-000-0000
4 6	90102.REPO	CBOMOMRU	01-000-910008-OMR-95005-000-0000
4 7	90103.GOVTSER	CBOMOMRU	01-000-910008-OMR-95006-000-0000
4 8	90104.CDBKS	CBOMOMRU	01-000-910008-OMR-95007-000-0000
4 9	90106.REVREP	CBOMOMRU	01-000-910008-OMR-95009-000-0000
5 0	90107.PAYROLL	CBOMOMRUHRD	01-000-910008-OMR-95010-000-0000
5 1	90108.BKSFEE	CBOMOMRU	01-000-910008-OMR-95011-000-0000
5 2	90109.BILLS	CBOMOMRUFID	01-000-910008-OMR-95012-000-0000
5 3	90111.TBDISC	CBOMOMRU	01-000-910008-OMR-95014-000-0000
5 4	90112.BDIS	CBOMOMRU	01-000-910008-OMR-95015-000-0000
5 5	90113.PENSION	CBOMOMRU	01-000-910008-OMR-95016-000-0000
5 6	90114.COMMPAPERS	CBOMOMRU	01-000-910008-OMR-95018-000-0000
5 7	90115.DEPFAC	CBOMOMRU	01-000-910008-OMR-95019-000-0000
	AFAQ System		
5 8	GCCNET BMA		01-000-263028-OMR-19031-000-0000
5 9	GCCNET KUWAIT		01-000-263028-OMR-19032-000-0000
6 0	GCCNET QMA		01-000-263028-OMR-19033-000-0000
6 1	GCCNET SAMA		01-000-263028-OMR-19034-000-0000
6 2	GCCNET UAE		01-000-263028-OMR-19035-000-0000



#	Old Account Code	BIC Code	New Oracle GL account
	Fees & Charges		
6 3	Overdraft Fees Collections		01-000-437029-OMR-00000-000-0000
6 4	RTGS Charges		01-000-437028-OMR-00000-000-0000

20. Appendix V: Payments Return Reason Code

Code	Explanation
AC01	Format of the account number specified is not correct
AC03	Wrong IBAN in SCT
AC04	Account number specified has been closed on the bank of account's books
AC06	Account specified is blocked, prohibiting posting of transactions against it.
AC13	Debtor account type is missing or invalid
AC14	An agent in the payment chain is invalid
AC15	Account details have changed
AC16	Account is in sequestration
AC17	Account is in liquidation
ADRM	Beneficiary account is dormant
AG01	Transaction forbidden on this type of account (formerly No Agreement)
AG02	Bank Operation code specified in the message is not valid for receiver
AM01	Specified message amount is equal to zero
AM02	Specific transaction/message amount is greater than allowed maximum
AM03	Specified message amount is a non-process able currency outside of existing agreement
AM04	Amount of funds available to cover specified message amount is insufficient.



Code	Explanation
AM05	Duplication
AM06	Specified transaction amount is less than agreed minimum.
AM07	Amount of funds available to cover specified message amount is insufficient.
AM09	Amount received is not the amount agreed or expected
AM10	Sum of instructed amounts does not equal the control sum.
ARDT	Already returned original SCT
BACL	Beneficiary account closed
BALC	Beneficiary account blocked
BADE	Beneficiary account does not exist
BADC	Beneficiary account is in a different currency
BDIN	Beneficiary Name does not match Beneficiary account number
BE01	Identification of end customer is not consistent with associated account number (formerly Creditor Consistency).
BE04	Specification of creditor's address, which is required for payment, is missing / not correct (formerly Incorrect Creditor Address).
BE05	Party who initiated the message is not recognized by the end customer
BE06	End customer specified is not known at associated Sort/National Bank Code or does no longer exist in the books
BE07	Specification of debtor's address, which is required for payment, is missing/not correct.
BE08	Returned as a result of a bank error.
CCBJ	Customer Credits Blocked (Judiciary)
CN01	Authorization is cancelled.
CSUM	Checksum failure
CURR	Currency of the payment is incorrect
CUST	Cancellation requested by the Debtor
DS28	Return following technical problems resulting in erroneous transaction.
DT01	Invalid date (eg, wrong settlement date)



Code	Explanation
ED01	Correspondent bank not possible.
ED03	Balance of payments complementary info is requested
ED05	Settlement of the transaction has failed.
ERIN	The Extended Remittance Information (ERI) option is not supported.
FF05	Local Instrument code is missing or invalid
FOCR	Return following a cancellation request
FR01	Returned as a result of fraud.
FRTR	Final response/tracking is recalled as mandate is cancelled.
IBAN	Invalid Beneficiary account number
IBIC	Invalid Beneficiary BIC
MD06	Return of funds requested by end customer
MD07	End customer is deceased.
MS02	Reason has not been specified by end customer
MS03	Agent has not specified reason.
NARR	Reason is provided as narrative information in the additional reason information.
NOAS	No response from Beneficiary
NOCM	Customer account is not compliant with regulatory requirements, for example FICA (in South Africa) or any other regulatory requirements, which render an account inactive processing.
NOOR	Original SCT never received
PPCI	Purpose of Payment Code incorrect or invalid
RC01	Bank Identifier code specified in the message has an incorrect format (formerly Incorrect Format for Routing Code).
RC07	Incorrect BIC of the beneficiary Bank in the SCTR
RF01	Transaction reference is not unique within the message.
RR01	Specification of the debtor's account or unique identification needed for reasons of regulatory requirements is insufficient or missing
RR02	Specification of the debtor's name and/or address needed for regulatory requirements is insufficient or missing.

Code	Explanation
RR03	Specification of the creditor's name and/or address needed for regulatory requirements is insufficient or missing.
RR04	Regulatory Reason
RUTA	Return following investigation request and no remediation possible.
SL01	Due to specific service offered by the Debtor Agent
SL02	Due to specific service offered by the Creditor Agent
SL11	Whitelisting service offered by the Debtor Agent; Debtor has not included the Creditor on its "Whitelist" (yet). In the Whitelist the Debtor may list all allowed Creditors to debit Debtor bank account.
SL12	Blacklisting service offered by the Debtor Agent; Debtor included the Creditor on his "Blacklist". In the Blacklist the Debtor may list all Creditors not allowed to debit Debtor bank account.
SL13	Due to Maximum allowed Direct Debit Transactions per period service offered by the Debtor Agent.
SL14	Due to Maximum allowed Direct Debit Transaction amount service offered by the Debtor Agent.
SP01	Account holder stops payment.
SP02	Previously stopped by means of a stop payment advice.
TM01	Associated message was received after agreed processing cut-off time.
TRAC	Return following direct debit being removed from tracking process.
ULBA	Unable to locate Beneficiary account
UPAY	Payment is not justified.
XXOO	Unknown reason (system replaces when receives a reason not registered in the CC dictionary)

**21. Appendix VI: Contacts Details**

Designation	Office Number
Manager Payment Systems Operations Department	24149084
In-Charge, RTGS System, Large Value Payments	24149079
RTGS Operations Team	24149082/ 24149083
RTGS Support	24149076 /24149078



22. Appendix VII: Transaction type code listing and usage

Please find below the transactions type code listing and usage.

Type Code	Description	W1 & W3	W2	Holiday W1	Sudden Holiday W1	Direction of Usage
000	System operations	Yes	Yes	No	No	CBO RTGS System Internal
001	Ordinary transfers	Yes	Yes	YES	YES	Partic -> Partic Partic -> CBO Dept CBO Dept-> Patric
002	Cash withdrawal operations	No	Yes	No	No	Patric->CBO CUR Dept
003	Cash deposit operations	No	Yes	No	No	CBO CUR Dept->Patric
004	Outgoing GCC Cross Border Multi-Currency Transfer	No	Yes	No	No	Patric-> GCC RTGS Patric
005	Incoming GCC Cross-Border Multi-currency Transfer	No	Yes	No	No	GCC RTGS Patric ->Patric
006	DVP operations	No	Yes	No	No	CBO MOD Dept-> Patric
007	CBO REPO operations	No	Yes	No	No	CBO MOD Dept-> Patric
008	Trading operations	No	Yes	No	No	CBO MOD Dept-> Patric
009	DVP operations from Depository	No	Yes	No	No	CBO MOD Dept-> Patric
010	Covering Net Debit position	Yes	Yes	Yes	Yes	CBO RTGS System-> Patric
011	Clearing transactions from Clearing system	Yes	Yes	Yes	Yes	CBO RTGS System-> Patric
012	Clearing transactions for Clearing system	Yes	Yes	Yes	yes	CBO RTGS System-> Patric
013	General Ledger transactions	Yes	Yes	Yes	Yes	CBO RTGS System Internal
014	Return transactions	Yes	Yes	Yes	Yes	Partic -> Partic Partic -> CBO Dept CBO Dept-> Patric
015	CBO Buy-back operations	No	Yes	No	No	CBO MOD dept-> Patric
016	Payroll transaction	No	Yes	No	No	Partic -> Partic CBO HR Dept-> Patric
017	Fees collection	Yes	Yes	Yes	Yes	CBO RTGS system-> Patric CBO Dept-> Patric
018	Finance Payment	No	Yes	No	No	CBO Dept-> Patric
019	Capital Deposit/Withdrawal	No	Yes	No	No	CBO CUR Dept->Patric
020	Discounting with CBO	No	Yes	No	No	CBO MOD Dept-> Patric
021	Trading Operations for CD	No	Yes	No	No	CBO MOD Dept-> Patric
022	Bank Deposit Insurance Scheme BDIS	No	Yes	No	No	CBO Dept-> Patric Partic -CBO
023	Pension Funds	No	Yes	No	No	Partic -> Partic CBO HR Dept-> Patric
024	Deposit facility	No	Yes	No	No	CBO MOD Dept-> Patric



025	Unsecured interbank lending (call money market)	No	Yes	No	No	CBO MOD Dept-> Patric
026	Rediscounting of CPs	No	Yes	No	No	CBO MOD Dept-> Patric
027	Interbank Repo Operations	No	Yes	No	No	CBO MOD Dept-> Patric
028	Interbank Buy-back Operations	No	Yes	No	No	CBO MOD Dept-> Patric
029	Payroll Loan Settlement	Yes	Yes	No	No	Partic -> Partic CBO HR Dept-> Patric
030	Currency exchange	No	Yes	No	No	Partic -> Partic
031	Shortage of Cash	No	Yes	No	No	CBO CUR Dept->Patric
032	Excess of Cash	No	Yes	No	No	CBO CUR Dept->Patric
033	Outgoing Foreign Transfer	No	Yes	Yes	Yes	Partic ->CBO ISD dept
034	Incoming Foreign Transfer	No	Yes	No	No	CBO ISD dept->Patric
035	Tax Payment	No	Yes	No	No	Partic -> Partic CBO Dept-> Patric
036	Dividend Payment	Yes	Yes	No	No	Partic -> Partic
037	Auction Settlement of Government Bonds	No	Yes	No	No	CBO MOD Dept-> Patric
038	Payroll End of Service	Yes	Yes	No	No	Partic -> Partic CBO HR Dept-> Patric
039	One Time Payment	No	Yes	No	No	Partic -> Partic CBO HR Dept-> Patric
040	Commission For TBills	No	Yes	No	No	CBO MOD Dept-> Patric
041	Commission For Bonds	No	Yes	No	No	CBO MOD Dept-> Patric
042	FOREX deal between participants	Yes	Yes	Yes	Yes	Partic -> Partic
Note	W1,W2,W3 are the Windows in Normal Business days					
:	Holiday W1 is the Window available on Friday & Saturday					
	Sudden Holiday W1 is the Window available on Declared/special Holidays					
	Participant to CBO department transaction is restricted on W1,W3,Holiday W1 & Sudden Holiday W1					
	CBO Department to Partciapnt Transactions restricted on on W1,W3,Holiday W1 &Sudden Holiday W1 .And allowed only on special cases on these windows					
	Special restriction for proecessing transactions to MOF and MCD					
Abbr	Partic - Partciapnts (All Banks , MOF, MCD)					
eviat	CBO-Dept - CBO different business departments					
ions	CBO-MOD - Form CBO SSS(Security Settlement system operated by MOD (Market Operation Department)					
	CBO CUR Dept- CBO currency Department					
	CBO HR Dept- CBO Payroll department					



23. Appendix VIII: RTGS 24 X 7 System Business Day Schedule

Please find attached PDF document "RTGS Business Day 24X7 Operations V4.pdf" .