CENTRAL BANK OF LIBERIA

Real Time Gross Settlement (RTGS) System Rules

Version 2_3

09 Nov. 2017

Table of Contents

Document Control

Version	Date	Description	Sections Affected	Initiated by	Approved by
2_3	09 Nov., 2017	Working Draft – prior to CBL approvals			

Document Release

The current version of this document is the pdf document with the greatest version number. After each new release, the version number of the word document is incremented. Point increases are used where there are minor changes, and whole number increases are used where there is a significant change in the released document.

To issue a new version, the word version is saved in pdf format after updating the Document Control section.

1.   General Principles and Objectives

The purpose of this document is to define the System Rules for the Real Time Gross Settlement System (RTGS) which is the interbank payment system for Liberia. These Rules define various operating aspects of RTGS, together with the duties and obligations of all Participants including CBL in its role of both System Operator and Participant. Participants are required to signify their acceptance of these Rules in writing prior to being given access to RTGS.

1.1   General

RTGS is the interbank large value payment system for Liberia. RTGS ensures:

- The final and irrevocable gross settlement in Participants' Settlement Accounts of payments initiated by Participants both on their own behalf and on behalf of their customers;

- The final and irrevocable gross settlement in Participants' Settlement Accounts of the net positions arising from the deferred net settlement (DNS) operations of:

The Automated Clearing House (ACH)

Other Clearing Houses as applicable

- The final and irrevocable settlement of transactions involving Government securities processed through the Central Securities Depository on the principle of Delivery versus Payment (DvP).

These Rules shall be applicable to all Participants which are authorised by CBL and which have signed their agreement hereto.

The Participants of RTGS act in their own name. In order to become a Participant, an institution shall comply with the criteria on operational capacity, financial soundness, legal soundness and financial requirements as detailed below in section 2 – Access criteria and conditions.

Participants shall at all times act in good faith.

The "Rules" shall mean these Rules and each related Annex and attachment thereto and hereto, as supplemented by related materials, including User Manuals, system documentation and other documentation provided (the Materials). Any of these Materials may be amended from time to time. If there is a conflict between these Rules and any Annex, the terms of the Annex will prevail in respect of the relevant Service. Section 25 describes how these Rules may be amended from time to time.

All time indications in these Rules relate to the time at the place where the Head Office of CBL is located.

The specific terminology of RTGS and the symbols used are explained in the Glossary below.

1.2   Role of Central Bank of Liberia

CBL is the Central Bank of Liberia and the System Operator and Technical Operator of RTGS. It is the entity with the legal responsibility for controlling, managing and operating RTGS.

In its capacity as the Central Bank of Liberia, CBL administers the Settlement Accounts of the Participants and provides intraday liquidity and facilities to ensure efficient and sound clearing and settlement systems. In this respect, CBL oversees the payment systems active in Liberia, and acts as a settlement agent in its capacity as System Operator of RTGS.

In its capacity as System Operator, CBL is responsible for:

- Authorisation of Participants in RTGS;

- The establishment and maintenance of these Rules and related Procedures; and

- The authorisation of operating standards and procedures of RTGS.

CBL will oversee the adherence to these Rules by the Participants.

As Technical Operator of RTGS, CBL administers the operation of the daily business cycle, manages the creation of reports and charts and is responsible for the security of RTGS data, software and infrastructure, including managing backups and fallback situations.

CBL may, at its own discretion, delegate operational tasks to third parties. This delegation will not in any way affect CBL's responsibilities towards the Participants.

1.3   Glossary

Short Name	Full Name	Explanation/Definition
	Acceptance (for settlement)	The moment at which an RTGS Payment becomes irrevocable as far as the sender is concerned. This is the point at which a transaction passes the tests to determine whether there is sufficient Collateral for the transaction to proceed.
ARM Workplace	Access Right Manager workplace	A system workplace to enable authorised persons to control the rights to perform actions in RTGS (operated by CBL System Administrators).
ABM Workplace	Account Balance Monitor Workplace	A system workplace for financial monitoring (operated by CBL System Administrators).
	Addressee	Participant receiving a Payment Instruction from the System.
AM Workplace	Audit and Monitoring Workplace	A system workplace for system activity monitoring (operated by CBL System Administrators).
	Audit Trail	A sequential record of events having occurred in RTGS containing detailed information to assist subsequent incident analysis. Participants can view the Audit Trail of their own transactions. Only CBL can view the full Audit Trail.
	Authentication	The methods used to verify the origin of a message or to verify the identity of a Participant connected to a system. See also Digital Certificate & Digital Signature.
	Authorised Person / Authorising Person	Person duly authorised by all necessary action to access data and to provide instructions with respect to bank accounts, funds transfers and other financial transactions by electronic means and/or person designated to access such data and to provide instructions, on behalf of the Participant in connection with the Services and the limitations, if any, upon such authority.

Short Name	Full Name	Explanation/Definition
ACH	Automated Clearing House	A service or system for the clearing and netting of files of 'retail-level' payments, each of which is required to provide regular net settlement files (DNS Files) to RTGS for final settlement. Current Clearing Houses operating in Liberia are: Automated Clearing House (ACH) Other ACHs may be established in future and will be required to effect DNS through RTGS.
	Available Balance Or Available Funds	The balance of the Settlement Account less any amounts held in reserves that form part of the Settlement Account.
	Back-up	The process of keeping off-site mirrored (ie. real-time) copies of essential system files, including the RTGS database, to ensure that the System can be recovered within the timeframes specified in relevant SLAs in the event of the main production system failing or other disaster occurring. Also used to refer to the copy files.
CBL	Central Bank of Liberia	The central bank of Liberia and operator of RTGS.
BIC	Bank Identifier Code	A unique address that identifies precisely the financial institutions involved in international financial transactions using the SWIFT network. BICs are used in RTGS to identify Participants.
	Beneficiary	The recipient of a payment.
	Block	A CBL-only action taken via an RTGS menu function which prevents a specific Participant from sending and or receiving payment messages to/from the System.
	Business Continuity	A payment system's arrangements that aim to ensure that it meets agreed service levels even if one or more components of the System fail or if it is affected by an abnormal external event. These include both preventative measures and arrangements to deal with contingencies.

Short Name	Full Name	Explanation/Definition
	Business Day	A day on which RTGS is operating to process payments.
	Clearing House	A service or system for the clearing and netting of files of 'retail-level' payments, each of which is required to provide regular net settlement files (DNS Files) to RTGS for final settlement. Current Clearing Houses operating in Liberia are: - Automated Clearing House (ACH) - Other ACHs may be established in future and will be required to effect DNS through RTGS.
	Collateral	An asset that is delivered by the collateral provider to secure an obligation to the collateral taker.
	Constraining Event	Processing, communications or other failure of a technical nature; Inaccessibility (total or partial) to facilities by means of which payments are sent and received; or Manifestation of industrial action, which affects, or may affect, the ability of any Participant to participate to the normal and usual extent in sending and receiving payments.
	Contingency Event	Any Constraining Event or any other event or circumstance specified by CBL.
	Cut-off	A designated time beyond which certain functions cannot be performed, as specified in Annex 8.
DBO Workplace	Database Back Office Workplace	A system workplace enabling authorised CBL personnel to work with system data, e.g. for managing Users, changing access rights, managing the daily timetable, etc. (operated by CBL System Administrators).
DNS	Deferred Net Settlement	A process in which settlement takes place on a net basis after a number of individual payments have been processed in a Clearing House.

Short Name	Full Name	Explanation/Definition
DNS File		A file containing the net positions (credit and debit) of all participants in a Clearing House, which is produced following a clearing session in a Clearing House. The credits and debits in each DNS File must net out to zero.
DvP	Delivery versus Payment	Mechanism used in securities transfers transactions, which ensures that the final transfer of ownership of the securities (the delivery) can be considered completed only if the actual payment for the transaction has been made.
	Digital Certificate	An electronic record which enables devices such as electronic tokens to be authenticated by the System and system components to authenticate each other, using PKI methods (see PKI).
	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.
EOD	End of Day	End of the Business Day for RTGS (see Annex 8).
	Fallback	Documented contingency arrange- ments to be initiated in the event of a failure or disruption to service.
	e-token	A USB token which carries an embedded chip with memory and/or processor functions in which is contained a Digital Certificate allocated to a specific User.
FCO	Final Cut-off	Time at which RTGS cuts off processing of RTGS transactions and cancels any queued RTGS Payment transactions for value today (see Annex 8).
	Force Majeure	A term frequently used in contracts to describe a situation in which a party is unable to carry out its contractual obligations due to circumstances outside its control, as defined in 22.1.

Short Name	Full Name	Explanation/Definition
GL	General Ledger	CBL's General ledger in which CBL's accounts, including those it holds for the Participants, are held.
	Government Securities	Securities issued by the Government of Liberia.
	Gridlock	A situation that can arise in a funds or securities transfer system in which the failure of some transfer instructions to be executed (due to insufficient funds or securities balances) prevents fulfilment of a substantial number of instructions given by other Participants.
	Gridlock Resolution	Act of resolving Gridlock within the Payment Queues without overdrawing the accounts involved.
	Gross Settlement	The Settlement of funds and securities transfers, which is effected individually on an order-by-order basis, i.e. without netting debit against credit payment transfers.
	In Writing	(i) On paper, signed by an authorised officer of the sender; or (ii) by e-mail containing a document signed by an authorised officer; or (iii) for Participants that cannot receive e-mail, by Authenticated Faxes or by SWIFT message type camt.998.
IT	Information Technology	
	Insolvency Event	Any collective measure provided for in the law of Liberia or a third country, either to wind up the Participant or to reorganise it, when such measure involves the suspension of, or the imposition of limitations on, transfers or payments, such as an adjudication order, a request for composition, extension or suspension of payment, moratorium, liquidation and other similar judicial procedures.

Short Name	Full Name	Explanation/Definition
	Interface	The common boundary between two functional elements, two layers of a system architecture, or between two physical devices that is defined by its functional characteristics, common physical characteristics of the link between them, signal or other characteristics.
ISO	International Organisation for Standardisation	A worldwide federation of national standards bodies from some 140 countries. The mission of ISO is to promote the development of standardisation in order to facilitate the international exchange of goods and services.
ILF	Intraday Liquidity Facility	Credit extended by CBL to a Participant for a period of time that is less than one Business Day for the purpose of providing liquidity to the Participant.
	ILF Account	An account in RTGS which is used to hold the status of a Participant's usage of ILF.
	Liquidity	The measure of a Participant's ability to meet its current obligations in respect of funds and/or securities transfer. In the context of RTGS, this comprises four components: available funds (balance) on the Settlement Account, queued payment transfers from other Participants to its account, credits extended by the central bank via the ILF and funds from interbank money market transactions.
LAN	Local Area Network	A computer network that spans a relatively small area, generally confined to a single building or group of buildings.
	Materials	These Rules and each related Annex and attachment thereto and hereto, supplemented by User Manuals, data, processes and other documentation relating to RTGS and provided by CBL.
	Monitoring and Control TMON Workplace	A workstation which is used by Participants for monitoring their activities in online mode. It allows the Participant to view static and dynamic data such as messages and payment documents flows, accounts and their balances, participants and users information.

Short Name	Full Name	Explanation/Definition
	Netting	An agreed offsetting of obligations between two or more parties or Participants in which a greater number of obligations is reduced to a smaller number of obligations.
	Operational hours	The system day of RTGS, which is defined through a number of operating 'windows' as detailed in Annex 8.
	Participant	A member of the RTGS system, including its operator (CBL).
	Participant Credit	A credit transaction against a Participant's Settlement Account which is made by CBL rather than initiated by another Participant. A Participant Credit always debits CBL.
	Participant Debit	A debit transaction against a Participant's Settlement Account which is made by CBL (e.g. for repayment of an overnight or other loan or debiting RTGS usage fees). A Participant Debit always credits CBL.
	Participant Transfer	A transfer of funds which is made by CBL from one Participant's Settlement Account to another's (e.g. in the event that the sending Participant loses connectivity to RTGS – see 17.2).
	Payment	A payer's transfer to a payee within RTGS against the payee's monetary claim.
	Payment Instruction	An order or message requesting the transfer of funds.
	Payment Message	A set of data transferred via an electronic mechanism which specifies the payer and payee of the transaction, the amount to transfer and the value date, and which enables the settlement of the transaction between Participants in a Payment System.
PvP	Payment versus Payment	A mechanism in a foreign exchange settlement system which ensures that a final transfer of one currency occurs if and only if a final transfer of the other currency or currencies takes place.

Short Name	Full Name	Explanation/Definition
	Pledge	A delivery of property to secure the performance of an obligation owned by one party (debtor/pledger) to another (secured party/pledge). A pledge creates a security interest in the property so delivered.
	Primary Site	The RTGS principal operating site.
	Priority or Priority Code	A numeric value between 1 and 99 which RTGS uses as a factor in determining the sequence in which it executes Payment Instructions. Priorities 1 to 9 inclusive are reserved for use by RTGS and CBL.
	Procedures	The activities and the methods designated in these Rules.
PKI	Public Key Infrastructure	A highly secure method for securing access and information transfer based on the use of Public and Private keys. Allows for data encryption, server authentication, message integrity, and client authentication for connections between the user's browser and the application server. Can be used to achieve non-repudiation of transactions.
	Queue	A queue in which RTGS Payment Instructions, which are not settled due to a lack of funds, are held for settlement until either sufficient funds are put into the paying Participant's Settlement Account or the end of the Evening Exchange period for Interbank payments is reached (whichever occurs first). There is one Queue per Participant for each currency.
RTGS	Real-Time Gross Settlement	The process whereby Payment Instructions are settled by debiting and crediting the involved Settlement Accounts immediately (in real time) and individually (gross) with finality and irrevocability.
Repo	Repurchase of Securities	An agreement in which money is advanced against securities with a change in beneficial ownership of the securities, on the basis that they will be bought back at an agreed later time. This process may be automated.

Short Name	Full Name	Explanation/Definition
	Security Administrator	An authorised person at CBL or a Participant who has access to RTGS for the purpose of maintaining User details and the Profiles of User in RTGS. A Security Administrator cannot have access to RTGS payment entry, management and enquiry functions.
SLA	Service Level Agreement	A contractual document signed between: (i) CBL and Participants; and (ii) CBL and other Service Providers defining the operational RTGS service levels.
	Services	Means all functions provided or to be provided by CBL to Participants pursuant to these rules.
	Settlement	The process of debiting and crediting Participants' Settlement Accounts such that the payment is final and unconditional at the time that the Settlement Accounts of the relevant Participants have been credited and debited.
	Settlement Account	The account held by each Participant with CBL, used to hold funds and settle transactions between Participants. Each Participant has one Settlement Account per currency.
	Settlement [Service] System	The system in which the settlement operation takes place.
	Shared Payment Gateway	A web-based central service through which Participants can send limited numbers of Payment Instructions to RTGS.
SWIFT	Society for Worldwide Interbank Financial Telecommunication	International institution owned by its members which enables electronic messages to be sent securely between banks and other financial institutions.
STP	Straight Through Processing	The connection of one computer system to another to enable automatic exchange of transactions.
	System, or the System	The RTGS system which is the subject of these Rules.

Short Name	Full Name	Explanation/Definition
	System Administrator	The person appointed by CBL to supervise the operation of RTGS.
	System Log	A secure record of the technical functioning of the System.
	System Operator	CBL.
	Technical Acceptance	The point at which RTGS has validated the format of a message.
	Technical Operator	CBL.
TTC	Transaction Type Code	A Code to identify certain types of payment messages and how they should be processed. TTCs are listed in Annex 17.
	User	An Authorised Person who has access to RTGS.
	User Manual/ Guides	Documentation defining how to use RTGS as listed in Annex 15.
	User Profile	The collection of attributes which define a User.
	Value Date/Value Day	The Business Day on which the amount of a successful Payment Instruction will be at the disposal of the receiving Participant (payee) or its client.
VPN	Virtual Private Network	A dedicated telecommunications network connecting Participants to RTGS.

2.   Access Criteria and Conditions

2.1   Participants

The following entities participate in RTGS:

- The Commercial Banks licensed by CBL;

- CBL itself;

- Clearing Houses, e.g. ACH

2.2   Operational Capacity

2.2.1 Equipment

Central Bank of Liberia shall not be obliged to supply to Participants any hardware or operating system software to enable utilisation of the Services.

CBL shall provide to each Participant, and the Participant will install and configure, any necessary components such as an initial set of e-tokens to support the RTGS software in accordance with CBL's instructions. The Participant shall at no time have any proprietary interest in the RTGS software, and supporting components must be returned by the Participant to CBL on termination or earlier on demand.

2.2.2 Materials

The Materials provided in connection with the Services (including, for example, access to RTGS) are the exclusive and confidential property of CBL. The Participants agree to keep these Materials confidential, to limit access to those of their employees (under a similar duty of confidentiality) who require access for the proper use of the Services, and to use all Materials in the manner designated therein and in the ordinary course of their business, and not to modify any.

Nothing in these Rules will affect the copyright status of any of the Materials and the provisions of this paragraph will apply whether or not such Materials are copyrighted.

2.2.3 Primary and Fallback Computer Facilities

Each Participant shall have a SWIFT Bank Identifier Code (BIC). The BICs of the Participants are specified in Annex 1 to these Rules.

Each Participant must be connected to the System for submission and receipt of payments, either via the Central Bank of Liberia Network (VPN) or via SWIFT.   In addition each Participant must have the Operator machine,

Conntroller machine and a Monitoring & Control TMON Workplace (Web Interface) as specified in Annex 16, configured to exchange messages with the central RTGS System and communicating via the SWIFT Network. Participants may also use the web-based Shared Payment Gateway for low volumes of payments.

Each Participant shall also provide for fallback IT equipment for access to RTGS. Both primary and fallback IT equipment must be operated by personnel fully qualified and authorised at all times to take appropriate action on behalf of the Participant with respect to the operation of such computer facilities, according to these Rules.

Documents describing the standards and communication protocols (and other functional requirements) for a Participant's computer interface to RTGS shall be provided by CBL to each Participant that connects to RTGS. These documents are itemised in Annex 15. Each Participant shall comply with, and its computer interface must function in accordance with, such standards and protocols. No computer interface may be implemented unless it has been approved by CBL.

In order for all participants to meet the online and real time compliance of instant payments to their customers' accounts as payments are sent to receiving banks, participants **MUST** have interface application to bridge between RTGS and their Core Banking Application. Violation to this Straigh-Through Process (STP) compliance will leave with no alternative but to fine the participant in violation of this rule.

In order to ensure the stable and correct functioning of the System, CBL may make the participation of a Participant in RTGS, as well as the maintenance of such participation, dependent upon the successful outcome of tests demonstrating that the Participant has the operational and technical capacity required (notably with regard to its IT systems and telecommunications). CBL communicates the contents, conditions and dates of these tests by ordinary letter to each Participant concerned.

CBL shall not be responsible for any expense incurred by a Participant in establishing any primary or fallback computer facility connected to RTGS under this section.

2.2.4 Staffing at Connection and Changes to Connection

The office(s) in which a Participant's primary connection is located must be staffed by personnel who are fully qualified and complying with the requirements in section 4 – Procedures, and are authorised at all times by the Participant to take appropriate action on behalf of the Participant with respect

to the connection after having signed the User Application Form in Annex 4 to these Rules.

Any Participant wishing to change the location of its primary connection must obtain the approval In Writing of CBL.

2.2.5 Location of Computer Facilities

Any primary or fallback connection linked to RTGS may be located only in a location deemed suitable by CBL.

Any changes to the location of a primary or fallback connection shall not be a valid reason for requesting any changes to the RTGS operating timetable.

Any Participant wishing to change the location or the operational characteristics of its primary or fallback computer must present a proposed plan describing the change and obtain the agreement of CBL in advance of making the change. CBL reserves the right to require the Participant to alter the plan if in its opinion this poses a risk to the operational integrity of RTGS.

2.3   Financial Soundness

Participants are deemed to be financially sound if under the supervision of CBL.

2.4   Acceptance of these Rules

Each applicant Participant shall indicate its respective acceptance of these Rules by sending to CBL the Participation Agreement attached as Annex 2 to these Rules and forming an integral part hereof, signed by an authorised signatory of the relevant Participant.

Provided that the applicant Participant complies with the requirements for participation set out in these Rules, CBL will signify its consent by countersigning the Participation Agreement and indicating on the Participation Agreement the date on which such accession shall become effective. CBL undertakes to send a copy of the countersigned Participation Agreement to the relevant Participant.

3. Adding Participants and Changes in Participants' Status

3.1 Adding or modifying a Participant

Only CBL can introduce new Participants into RTGS. Each Participant shall provide the information stated in the Participant application form provided in Annex 2 to these Rules.

Each Participant shall, in case of merger, split off, name change or any other change in the information required in the Participation Agreement in Annex 2, notify CBL immediately and provide CBL with the information required for amending its Participation Agreement.

3.2 Suspension or Termination

3.2.1 Suspension

CBL may suspend the access of a Participant to RTGS for a specified or indefinite period of time in the following circumstances:

a) the Participant is subject to prudential supervision and the relevant supervisor requests such suspension;

b) by agreement with the Participant concerned;

c) the Participant no longer complies with a requirement for participation set out in the Rules;

d) an event occurs which affects, or may affect, the ability of the Participant to participate to the normal and usual extent in sending and receiving payments (a Constraining Event) for a period of time, but only during the continuance of that event and any subsequent period which might be necessary;

e) an Insolvency Event (as defined under the relevant Act) occurs in respect of the Participant (not being an event which results in a termination pursuant to section 3.2.2 below);

f) the Participant breaches its obligations under these Rules or the applicable Procedures and fails to rectify the breach or to provide a satisfactory justification.

CBL shall at its discretion decide on any term or grace period, taking into account the specific situation of the Participant concerned.

A Participant whose access to RTGS is suspended under this section is not entitled to participate in RTGS, but it still has a right to access its data outside the System via a request to CBL.

A Participant whose access to RTGS is suspended is not excused from discharging its obligations under these Rules, except as expressly provided in or pursuant to these Rules. From the moment CBL decides that the suspension becomes effective, any Payment Instruction from the respective Participant is no longer accepted until the reinstatement date.

CBL shall immediately notify all Participants (by the most expeditious means available) of any suspension.

CBL may at its discretion reinstate a suspended Participant. CBL shall, as soon as reasonably possible, notify all Participants of any decision to reinstate a suspended Participant and the re-commencement ("activation") date for that Participant.

3.2.2 Termination

A Participant ceases to be a Participant on:

a)   resignation;

b)   becoming insolvent or making an arrangement or composition with creditors generally;

c)   being wound-up, dissolved or otherwise ceasing to exist; or

d)   CBL terminating the participation in accordance with these Rules.

CBL shall at its discretion decide on any term or grace period, taking into account the specific situation of the Participant concerned.

A Participant may, by way of notice in writing to CBL, resign with effect from a date, which is 10 Business Days after the date of the service of the notice. The notice is irrevocable.   However, all banks that wish to be licensed banks within CBL's definition, must maintain their membership in RTGS.

Access to RTGS can be terminated by CBL in writing to the defaulting Participant with immediate effect, unless agreed otherwise, no other formalities or court intervention being required, if all of the following conditions have been fulfilled:

a)   a Suspension Event has occurred in respect of that Participant and has not been remedied within a reasonable period; and

b)   that Participant is subject to prudential supervision and CBL has consulted with the relevant supervisor regarding such termination; and

c)   CBL has provided an opportunity for that Participant to make submissions to CBL regarding such termination.

d)   CBL is not obliged to give any reasons for such decision and may revoke any such notice at any time before it becomes effective.

Any termination of access to RTGS shall not affect any right or liability arising under these Rules prior to the time such termination takes effect or arising in respect of any act, matter or thing occurring prior to that time.

A Participant whose access is terminated pursuant to this section shall continue to be bound by these Rules in respect of:

a)   any act, matter or thing occurring prior to the time such termination takes effect or as a result of such termination; and

b)   any fees, costs, charges and expenses which may be levied on, or which are to be reimbursed by Participants in accordance with these Rules in respect of periods which commence prior to the time such termination takes effect or which relate to any such act, matter or thing.

CBL will immediately notify all Participants (by the most expeditious means available) of any termination under this section.

Subject to any rights of set-off, counterclaim or combination, which are available at law, upon any termination of the access of a Participant:

a)   the terminating Participant must immediately pay all sums of money (if any) owed by it to any other Participant in respect of obligations arising from the exchange of payments; and

b)   all sums of money (if any) owed to it by any other Participant in respect of all such payments exchanged must be paid by that other Participant to the terminating Participant.

Any Participant whose access is terminated immediately ceases to be entitled to effect exchanges in RTGS in accordance with these Rules.

A Participant whose access is terminated is not entitled to be repaid all or part of any entrance, operating or other fee, which has been paid by it.

CBL reserves the right to charge an exit fee in accordance with the Participant Agreement.

4.   Security

4.1   Data Integrity and Confidentiality

4.1.1 Central Bank of Liberia

CBL warrants that the System has been designed and implemented to a high standard of security and reliability, with the objective of maintaining the integrity, availability and confidentiality of all data handled by the System. CBL will maintain strict confidentiality of all information provided by Participants and/or processed through the System.

The Participant hereby authorises the transfer of any information relating to the Participant to and between CBL and third parties selected by CBL for confidential use in connection with the provision of services to the Participants (including for data processing purposes) and further acknowledges that CBL and any such third party shall be entitled to transfer any such information as required by any law, court, legal process or as requested by any authority in accordance with which it is required under appropriate legislative or regulatory authority to act, as it shall determine.

The Participants acknowledge that the security procedures provided by CBL are designed to verify the source of a communication and not to detect errors in transmission or content including discrepancies between account names and numbers and that CBL, in its role as System Operator, may execute an instruction by reference to the account number only, even if the name on the account is also provided. CBL has no duty to discover, and shall not be liable for, errors made by or duplicate instructions issued by a Participant. Each Participant agrees to be bound by and to settle any electronic Payment Instruction executed in its name in accordance with the Procedures.

4.1.2 Participants

The Participants shall develop and maintain adequate internal security procedures and comply with all security procedures recommended in the Materials in order to prevent unauthorised utilisation of the Services. They must comply with the applicable Procedures and ensure that the payment flows in their internal systems are adequately shielded against any internal or external threat. Confidentiality and data integrity must be safeguarded.

Each Participant must designate among its staff three Participant Security Administrators who are responsible for communication with CBL regarding:

a)   the set-up of Users;

b)   amendment of User Profiles;

c)   removal of Users from the System, and

d)   the management of e-token and certificate issue and delivery to end-Users.

CBL keeps the list of Participant Security Administrators.

4.2   Communications

Each Participant and CBL agrees that the Services will be provided using the communication methods described in these Rules. Electronic communication is subject to the communication and data security methods as set forth in these Rules. The Participants agree to comply with the applicable procedures and the methods designated in these Rules, collectively, the "Procedures", which shall be used solely in connection with the Services and authorise CBL to act in compliance with the Procedures, as applicable, to transmit and display data and to act upon each instruction and, as appropriate, to instruct RTGS to debit and/or credit the Settlement Account of a Participant.

CBL is not obliged to follow instructions unless transmitted in accordance with these Procedures. Nonetheless, the Participants hereby agree that if CBL acts upon a request from an Authorised Person to accept an instruction given without following an agreed Procedure (a "special instruction") for whatever reason, the Participant will be bound by such special instruction and will indemnify and hold CBL harmless from any loss, liability, claim or expense (including legal fees) attributable to executing such special instruction. If CBL takes any action beyond those agreed in these Rules to verify the source or content of any communication, such additional action shall not be deemed to become part of the Procedures no matter how often CBL takes such additional action.

4.3   Use of Central Bank of Liberia-Supplied Materials

The security procedures, security devices, codes, passwords and other access methods are highly confidential and the Participants agree to use and guard them with the highest care and to notify CBL immediately upon discovering or having reason to suspect that any of the foregoing is or may be compromised.

Where software and/or hardware provided by CBL to a Participant incorporates features relating to security (including IDs and passwords and other measures) the Participant shall be solely responsible for the use of such features. CBL shall be entitled to assume that all use of such software and/or hardware is by persons authorised to access such facilities.

5.   Establishment and Maintenance of Users

5.1   General

Access to RTGS shall be permitted only to authorised and uniquely identified personnel (Users).

Each person named in the corresponding User registration application form (in the form of Annex 4 to these Rules) shall be an Authorised Person or the designee thereof duly authorised to receive, transmit and/or confirm data and instructions within the limits, if any, specified on the applicable User application form (a User). As long as CBL acts in compliance with the communication and data security methods as set forth in these Rules as these may be amended from time to time in accordance with the Procedures in these Rules, it shall have no further duty to verify the identity or authority of the person giving or confirming, or the contents of, any instruction. Notwithstanding any other provision hereof, CBL shall have the right, in its sole discretion, to refuse to execute any instruction, provided CBL, acting in good faith, doubts the authenticity or authorisation thereof. CBL shall provide prompt notice, which may be by telephone, to an Authorised Person of any such rejected instruction.

CBL shall be entitled to rely on the authorisations and User lists as set forth on a User application form until receipt by CBL, in normal circumstances at least two Business Days prior to the effective date thereof, of a written request for revocation or modification of such User application form, dated and signed by an Authorised Person. In urgent cases such request for revocation or modification may be made by Secure Email or Authenticated Fax and will be actioned by CBL immediately on receipt.

A User application form may be revised only by a written request signed by an Authorised Person and each such proposed revision is subject to CBL's consent in accordance with the procedure laid down in sections 5.3, 5.4, and 5.5 of these Rules. This section supersedes all prior agreements or practices in respect of instructions and the Procedures may not be changed by an oral agreement or by course of dealing or custom.

Each Participant will inform CBL as soon as practicable if any person authorised to utilise the Services on behalf of a Participant ceases to be employed by that Participant or ceases otherwise to work for that Participant or to be under its control.

5.2   Request to Create a User

Each Participant requesting the authorisation of a User shall, at least two (2) Business Days prior to the effective date thereof, complete and provide CBL in writing with:

a)   a User application form, as provided in Annex 4 to these rules, dated and signed by two (2) Authorised Persons;

b)   a User protocol as provided as part of the User application form in Annex 4 to these rules, dated and signed by the relevant User; and

c)   in the case of the creation of an Authorising Officer, a RTGS User profile request form as attached in Annex 5 to these rules, dated and signed by two (2) other Authorised Persons.

Only CBL shall have the right, in its sole discretion, to authorise new Participant Security Administrators and assign a User profile to such Users.

CBL also has the sole right to:

a)   allocate e-tokens; and

b)   issue digital certificates to Users (on the e-tokens).

Participants through their Security Administrators are responsible for the creation and maintenance of their other Users in RTGS, allocation of User names, User profiles and initial passwords.

Before a User can be registered, the User must complete RTGS User training appropriate to the functions to be performed and if so requested must demonstrate by passing a practical and/or theoretical test that he/she has the necessary knowledge to use RTGS.

CBL will provide one e-token with PIN to each registered User. Each e-token is exclusive to the user to whom it is issued, and in no circumstances is it to be shared with or used by another. When received by the registered User, the token's default password should immediately be changed. After the initial allocation, CBL reserves the right to charge the cost of these tokens to the Participants, e.g. for replacement tokens and expansion of the User base.

5.3   Request to Modify a User

Only Participant Security Administrators can assign and amend User profiles according to User responsibilities, required by Participants or by CBL. Such assignments and amendments will take place under dual control.

5.4   Request to Suspend or Delete a User

A Participant that requires one or more of its Users to be suspended or deleted can carry out the deletion on-line, but must report to CBL in writing that a User has been suspended or deleted. The report should be submitted on a RTGS User Suspension/Deletion form (see Annex 6 to these Rules).

In cases of emergency, CBL Administrators can also suspend Users or remove them from RTGS.

5.5   Creation and Maintenance of User Profiles

CBL RTGS Administrators allocate initial User profiles to Participants and may in the name and for the account of CBL, set up and amend information about a User, including the User profile, according to the information provided by Participant administrators.

CBL shall approve specific master templates for each Participant. Within the restrictions of this template, Participant management can define profiles for their staff, consistent with the segregation of duties principles. CBL will set up the master template on RTGS.

6.   Financial Collateral Arrangements

6.1   Establishment of Reserves

Each RTGS Participant may have a number of Reserves within its Settlement Account. Establishment of a Reserve has the effect of moving funds within the Settlement Account to a Reserve account where they can only be used by RTGS for the purpose defined when the Reserve is set up.

Two (2) types of Reserve can be set up by CBL; those that are under the control of the Participant and those that are under the control of CBL. CBL does not currently intend to establish any Reserves that it controls; in other words Participants can move funds into and out of Reserves as they wish. A Reserve, once set up, is available to all Participants (i.e. a particular named Reserve cannot be set up exclusively for the use of one Participant).

Each Participant will always have: (i) a Currency Reserve into which it can move funds for settling cash withdrawals; and (ii) one or more Clearing Reserves into which the Participant may move funds to cover obligations arising from the settlement of DNS Files from external Clearing Houses.

Participants may have as many other Reserves as they wish. CBL sets them up on each Participant's behalf. It should be noted that the downside of having numerous Reserves is that the available funds in the Settlement Account may become fully reserved leaving no funds available for settlement of payments; and/or adding a heavy administrative burden on the liquidity manager of each Participant to move funds regularly.

6.2   Intraday Liquidity Facility – ILF

CBL makes liquidity available to Participants on an intraday basis.

Each Participant has an ILF account which is debited whenever the Participant needs to make use of the ILF, up to a limit set by CBL for each Participant. The limit is covered by the securities which the Participant has moved into their designated ILF securities account. In each case the amount debited from the ILF Account is credited to the Participant's Settlement Account and is thus available for making payments. The ILF is invoked automatically whenever RTGS detects that one or more of certain thresholds have been exceeded, as described in the *RTGS Functional Design Specification.* It may also be requested explicitly by the Participant via RTGS. The Help-Desk of the Central Administration of the RTGS shall immediately inform the status of the participant settlemt account regad to decling in the account for refunding, or to request for ILF before the period of ACH.

The ILF is available strictly ***Intraday only*** and any ILF advances must be reversed before the end of the RTGS operating day as per the Daily Timetable (see Section 16 and Annex 8). As per CBL's guidelines, if a Participant fails to do so, the ILF will be

converted to an overnight Repo with CBL at an average lending rate. All ILF request should be channeled through the Office of the Head of Payment Systems Section via email by the Head of the Treasury Department of a commercial bank.

7.   Settlement of Clearing House Net Settlement Positions

DNS Files created by external Clearing Houses are settled in Participants' Settlement Accounts in RTGS. These files are settled as "all-or-nothing" multi-part transactions, with all debits being conducted simultaneously prior to simultaneous application of all credits.

The standard scheduled times for presentation and settlement of Clearing House DNS Files are specified in the RTGS daily operating timetable (see Section 16 and Annex 8). It is the responsibility of each Participant to ensure that they have sufficient funds in their Settlement Account to cover any net debit position each time a DNS File is settled. In these cases, as soon as settlement of DNS File is initiated, funds are automatically blocked in the Settlement Accounts of Participants that have a net debit position, to enable immediate Settlement to take place. If funds are not available in the Settlement Account, the appropriate Reserve (if it exists) or any ILF that may be available, of a Participant with a debit position, the DNS File is queued until such time as sufficient funds become available. Any Available Funds shall be moved automatically to the appropriate Reserve as they become available.

8.   Payments

8.1   Payments Suitable for RTGS

RTGS is designed to:

a)   process and settle Payments in accordance with the principles of RTGS;

b)   process and settle DNS Files created by external Clearing Houses (see Section 7);

c)   process and settle transactions in securities managed by the CSD.

d)   process and settle customer transfers

e)   process and settle inter-bank transfers

f)   process and settle government payments

g)   process and settle own account

h)   process and settle return funds

8.2   Payment Processing

RTGS processes interbank transfers carried out both on the Participants' own behalf and on behalf of customers of Participants.

RTGS payments are processed with same-day value unless a future value date is specified. Future value dates must not be more than five (5) working days ahead of the current working day.

8.3   Value Limits

The minimum limit as of now is zero until otherwise other when CBL will make a decision to define appropriate limit value. In a circunstance where a limit value will be set by CBL, critical time payments can be less than the minimum amount. There is no maximum amount set for RTGS transactions.

8.4   Payment Priorities

RTGS allows Participants to assign Priorities to RTGS Payments. CBL payments have the highest Priority. DNS Files have the next highest set of priorities. The order in which payments in the waiting queues are settled depends first on the Priority, and second on the time they are validated by RTGS within each Priority. The range of message priorities is defined in Annex 13.

8.5   Modification of Priority

A Participant may change the Priority of a queued payment message that it has submitted for settlement up to the point when it is accepted for Settlement. The procedure for changing Priority codes is detailed in the technical documentation.

9.   Messages

9.1   *Message Categories*

RTGS accepts messages from Participants in two categories:

1.   ***Transfers***, i.e. Payment Instructions.

2.   ***Queries***, which are divided into:

> a.   *Transactional Requests*, which change the status of a Transfer;

> b.   *Informational Requests*, which do not affect Transfers but rather request or provide information.

9.2   *Message Formats*

All messages must conform to SWIFT Message Formatting as defined in the Technical Documentation. The following message types are recognised by RTGS (NB SWIFT MT Format is used as per the table).

Message Type (MX)	MT Equivalent	Description	To/from whom may be sent
camt.003	MT985/STAT	Get account	Participant RTGS; CBL RTGS
camt.004	MT986/STAT	Return account	RTGS Participant; RTGS CBL
camt.004	MT986/PCPR	Notification for Participant having no enough funds to cover their Net Debit position	RTGS Participant
camt.005	MT985/SQDC	Request for RTGS payments queue summary information	Participant RTGS; CBL→RTGS
camt.005	MT195/STAT or MT295/STAT	Request for a status of transfer	Participant RTGS; CBL→RTGS
camt.005	MT195/DUPL or MT295/DUPL	Request to get a copy of transfer previously sent to the System	Participant RTGS; CBL→RTGS
camt.006	MT986/SQDC	Reply on related request for RTGS payments queue summary information	RTGS Participant; RTGS CBL
camt.006	MT196/STAT or MT296/STAT	Reply on a request for a status of transfer	RTGS Participant; RTGS CBL
camt.006	MT196/DUPL or MT296/DUPL	Reply on request to get a copy of transfer previously sent to the System	RTGS Participant; RTGS CBL
camt.007	MT195/PRTY or MT295/PRTY	Request to change a Priority of non-settled transfer	Participant RTGS; CBL→RTGS
camt.008	MT192 or MT292	Request to cancel non-settled (non-cleared) transfer previously sent to the System	Participant RTGS; CBL→RTGS
camt.018	MT999	Get Business Day Information	Participant RTGS
camt.019	MT999	Return Business Day Information	RTGS Participant
camt.052	MT941	Interim transaction report that is generated by related request	RTGS Participant; RTGS CBL
camt.053	MT950	Final Statement report on all settlement operation with specified account within a current business day. Includes RTGS payments only.	RTGS Participant; RTGS CBL
camt.054 CR	MT910	Credit confirmation. Confirms debiting of an account when related transfer is settled.	RTGS Participant; RTGS CBL

camt.054 DR	MT900	Debit confirmation. Confirms debiting of an account when related transfer is settled.	RTGS Participant; RTGS CBL
camt.060	MT920	Request to get an account balance report or interim transaction report	Participant RTGS; CBL→RTGS
camt.998	MT199/ TEXT MESSAGE or MT999/ TEXT MESSAGE	This message represents an e-mail sent from one Participant to another one. CBL may be issuer or recipient of this message as well.	Participant RTS Participant; Participant RTS CBL; CBL→RTGS Participant
camt.998	MT998	Proprietary message	Participant RTGS; CBL→RTGS
pacs.002	MTn96/STAT	Payment status notification	RTGS Participant; RTGS CBL
camt.025/ERRC	MTn96/ERRC	This message is generated if error occurs in related request message processing. This message is also is sent if payment message has not passed initial validation procedures.	RTGS Participant; RTGS CBL
camt.025/OK	MTn96/OK	Reply on successful processing of a request	RTGS Participant; RTGS CBL
pacs.004	MT103	Return payment	RTGS Participant; RTGS CBL
pacs.008	MT103	Single customer credit transfer	RTGS Participant; RTGS CBL
pacs.009	MT971	Net balance positions from Clearing systems or other Net system (e.g. Depository or Switch) for operations performed on net basis	Net system RTGS
pacs.009	MT202	General Financial Institution transfer	RTGS Participant; RTGS CBL
pacs.010	MT204	Interbank direct debit	RTGS Participant; RTGS CBL
pacs.008	MT102	Multiple Customer Credit Transfer[1]	RTGS Participant; RTGS CBL

---

[1] The message will be processed as a single transfer. Separate payments within the transfer will not be processed individually, but it is possible to view them in the Monitoring and Control TMON Workplace interface.

10.   Processing Procedure

10.1   General Issuing Conditions

Participants will comply with the timetable in Annex 8. They undertake to present the different types of messages before the cut-off times stated in the timetable.

Participants should monitor the messages in their Queues and take the necessary action to clear any transactions in the Queues before the Final Cut-off.

10.2   The Changing Status of Payments within RTGS

The detailed processing of Payment Instructions is described in the Technical Documentation. These Rules deal only with the basic principles.

RTGS operates on the gross settlement principle: an RTGS Payment is directly debited from and credited to Settlement Accounts. Prior to settlement, RTGS ascertains whether sufficient liquidities are available.

10.3   Submission and Validation

The Participants shall take all necessary measures to optimise the smooth flow of the payments, especially by adhering strictly to the timetable in Annex 8.

Payment Instructions sent by Participants shall immediately be validated by RTGS. If a Payment Instruction is rejected, an error message is sent to the issuer. A list of error codes is set out in Annex 9 to these Rules.

The 'handover point' between a Participant and RTGS is the point of Technical Acceptance. This is when RTGS has received and validated a Payment Instruction as being valid and has therefore accepted it for Settlement. An acknowledgement message is sent to the sending Participant at this point.

The accepted messages are recorded and chronologically processed by the System according to the FIFO ("First-In First-Out") principle within Priority for each currency.

10.4   Queuing

Payments shall be processed and settled as follows:

a)   the information necessary for settling the payment is extracted from the detailed Payment Instruction;

b)   if the sender has sufficient funds available, the payment is settled (sending Participant/s debited, beneficial Participant/s credited) and immediately becomes final;

c)   if the Available Funds are insufficient to settle the payment, RTGS puts the Payment Instruction in the Queue, or cancels it in accordance with the operating timetable.

10.5 *Processing of Payments in the Queue*

If Participants wish some Payment Instructions to be treated preferentially, they shall insert a higher Priority code in those messages. The order in which payments in the Queues are executed depends first on the Priority and second on the time they are validated by RTGS. RTGS treats payments with the same Priority in each Queue on the basis of the FIFO ("First-In First-Out") principle.

An increase in an issuer's Available Funds triggers the processing of its Payment Instructions in the Pending Queue. The sequence of order processing is determined as follows:

a)   payment messages with a higher Priority are always processed before those with a lower Priority; the latter are executed only if there are no longer any payments with a higher Priority left in the Queue;

b)   all RTGS Payments with the same Priority are classified and processed in the chronological order of acceptance (FIFO principle);

As soon as all the Payments in the Pending Queue of one issuer have been presented once, RTGS shall restart the processing of the Pending Queue, beginning with the Payment Instructions of the issuer for whom the first credit movement has been observed.

Participants may change the priority of any queued payments.

10.6 *Cancellation of Queued RTGS Payments*

10.6.1 by the Issuer

Queued Payment Instructions may be cancelled by the sending Participant using message type camt.008.

10.6.2   by CBL

CBL can cancel any queued Individual Payment Instructions in order to facilitate the smooth flow of funds through the System. In such case CBL shall immediately inform the initiating Participant by email.

RTGS will automatically cancel any payments that have not been settled at Final Cut-off.

10.7 Gridlock Resolution

10.7.1   Initiation of Gridlock 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 automatically detects a Gridlock situation and notifies the System Administrator, who initiates the Gridlock Resolution process.

Participants must monitor their Settlement Accounts during the day and ensure that they have sufficient funds available to meet their settlement responsibilities. CBL will monitor the position of each Participant and may instruct Participants to take the necessary steps to unblock the situation.

11.   Irrevocability of Payment Instructions

11.1   Queuing

After Technical Acceptance an RTGS Payment Instruction is placed into a Queue pending Acceptance for Settlement (which occurs after the Payment Instruction has passed the Available Funds test). While the Payment Instruction is in the Queue it may be cancelled by either the Participant or CBL. At Final Cut-off RTGS cancels any Payment Instructions which are still queued.

11.2   Irrevocability

As from the moment that the System has accepted a Payment Instruction for Settlement, withdrawal by a Participant or by the System is not allowed unless the payment is queued for settlement, in which case it may be cancelled if the situation warrants the cancellation, e.g. if it is stilled queued at Final Cut-off.

If a payment has been entered in error and it has been settled, it cannot be cancelled. Refer to sections 13.3 and 22.2.2 for procedures concerning the return of payments sent in error.

11.3   Finality

Settlement will be final and unconditional at the moment that the Settlement Accounts of the relevant Participants have been credited and debited. There is no perceptible delay between the acceptance for Settlement and the final Settlement in RTGS.

12.   **Reports and Enquiry Facilities**

CBL will provide the Participant with information on:

a)   the state of its Settlement Account;

b)   the transactions on its Settlement Account;

c)   its ILF position;

d)   its Queues;

e)   Business Day information;

f)   its End-of-Day status (daily statement);

g)   Others?

The specifications of message formats and report contents are detailed in the relevant User Manuals which are listed in Annex 15. Other regular reports, ad hoc or on-request reports not required as officially delivered versions can be viewed and printed directly from the screen at any time.

13.   Participant Management of Payments

13.1   Monitoring Payment Flows

Each Participant shall be responsible for monitoring throughout the day the Settlement of the payments it has sent, the number and amount of payments stored in its Queues, the balance of its Settlement Account, its ILF and the level of its Reserves. Each Participant must aim to avoid having unsettled payments.

CBL shall not be liable for any loss incurred by a Participant due to failure by a Participant to monitor and reconcile its payment flows, and each Participant hereby agrees to hold CBL and the other Participants harmless from and against any claim, cost or expense (including legal fees) resulting from their failure to monitor their payment flows and their failure to reconcile, pursuant to Section 22.2.1 of these Rules.

13.2   Prompt Execution of Payment Instructions

Participants shall send Payment Instructions to RTGS on behalf of their customers within at most one (1) hour from receipt of the corresponding request from the customer.

All settled customer payments shall be passed on to the Beneficiary accounts within at most one (1) hour following notification of settlement received from RTGS. Failure to this will constitute a violation to these rules, and the participant will be charge a fine determines by the Central Bank of Liberia

13.3   Return Payments

Return payments can be initiated by either the sender or the recipient of the original payment:

On request by the sending Participant: a Participant may request the return of a completed payment from the receiving Participant. The request must be made in writing, i.e. by email, fax or letter. In this case, the receiving Participant will return the payment to the sending Participant, if the funds are available. If the funds are not available, the two parties will either resolve the situation in accordance with the procedures contained in section 24.2 or submit the case to arbitration first before a judicial process.

At the initiative of the receiving Participant: if a Participant becomes aware that its Settlement Account has received a payment erroneously or for the wrong amount, it will return the payment to the sending Participant.

In both cases the return payment will be made using message type pacs.004 containing (*inter alia*):

1. The identification of the original payment in the Details field of the Payment Instruction

2. A return code selected from the table below.

3. Transaction Type Code (TTC) 014.

Code	Reason for Return
	This table to be completed according to local agreements between the banks

Return payments must be sent within one Business Day of:

- Receipt by a receiving Participant of a request made by a sending Participant;

- Receipt of the original payment where the receiving Participant detects an erroneous payment.

If the return payment has not been made within this time, the Issuing Participant may claim interest for delay from the receiving Participant. This interest is calculated on the basis of the overnight deposit rate applied by CBL.

14.   Intraday Credit and Overnight Loans

14.1   Primary Conditions

Intra-day credit is provided by CBL to Participants via ILF as described in Section 6.2.

14.2   Limitation, Suspension and Termination of Access to Intraday Credit

CBL may at its own discretion decide to limit, suspend or terminate the Participant's access to Intraday Credit if:

a)   the Participant or one of its creditors files for cessation of payments;

b)   the Participant is declared bankrupt;

c)   its account in RTGS has been terminated or the acts or omissions on the part of the Participant, in CBL's opinion, result in systemic risk or may endanger the smooth operation of RTGS;

d)   the Participant no longer complies with the eligibility criteria for monetary policy operations;

e)   the Participant does not comply or no longer complies with the conditions as set out in Section 2 of these Rules.

14.3   Overnight Repo

Any ILF that has been used during the day will mature at Final Cut-off. Thus, each Participant must have sufficient funds available for its ILF to be reversed before RTGS can close. If a Participant does not have sufficient funds at this point, it should borrow the necessary amount on the interbank market. If the Participant cannot borrow interbank, the outstanding ILF amount will be converted to an overnight Repo with CBL, at average lending interest rate. A participant shall request through the office of the Executive Governor of the Central Bank of Liberia for the conversion of ILF to overnight repo

15.   Account Structure

15.1   Settlement Accounts

Each Participant has one Settlement Account per currency in RTGS. As described in 6.1, funds can be moved from a Settlement Account to Reserves, which are a form of sub-account. The balance of the Settlement Account less the amount held in any reserves is the amount of funds available for settlement of RTGS Payments.

Amounts held in Reserves can only be used for specific settlement purposes as defined by each Reserve type.

Settlement Accounts are used for payment operations in RTGS. A Settlement Account cannot show a debit balance. The current account held in the General Ledger (GL) of CBL will be updated with the Settlement Account balance in RTGS at the end of the day for each Participant. Participants should ensure that any transfers of Settlement Account funds to deposit accounts held with CBL are made via RTGS before Final Cut-off.

Any movement in or adjustment to the balance of the CBL GL current account that occurs after End of Day in RTGS and before the Start of (next) Day in RTGS shall be reflected in the relevant Settlement Account as early as is practicable and generally when RTGS is opened for business for that next day.

15.2   Reserves

The use of reserves is described in 6.1.

15.3   INTRADAY LIQUIDITY FACILITY - ILF

Each Participant has one ILF Account per currency which is used to increase the amount of funds held in the Settlement Account. The status of a Participant's ILF is shown in its ILF Account, which at any time shows a debit balance in the amount of ILF that has been used so far in the current Business Day.

The use of ILFs is described in 6.2.

16.   Business days and Operating Hours

16.1 Business Days

RTGS operates each day Monday to Friday except for public holidays according to the annual calendar maintained by CBL and available via on-line enquiry in RTGS to all Participants. Any deviations from this planned schedule will if possible be announced five working days in advance in writing to each Participant's nominated contact person. In exceptional circumstances this announcement may be made during the Business Day and may have the effect of shortening or lengthening that particular Business Day.

16.2 Daily Operating Timetable

A Business Day schedule is composed of a sequence of periods. During each period there is a defined set of actions which may be carried out, as defined in the following paragraphs.

1.   System Start

The System is opened in offline mode for testing of connections.

2.   Account Housekeeping/Adjustment of balances

During this period CBL System Administrators carry out any necessary service functions, Settlement Account balances are set to zero and then loaded from CBL's GL, and fee payments are settled (at the end of the period) as necessary.

3.   Morning Exchange Period

During this period Participants (including CBL) exchange their payments (interbank and customer payments). In addition, DNS Files from external Clearing Houses may be received and settled.

4.   ACP/ACH Transactions Period

During this period all DNS files from external Clearing Houses are received, processed and settled

5.   Afternoon Exchange Period

Same as Morning Exchange Period but with a different fee rate.

6.   Evening Exchange Period

During this period Participants may enter interbank transfers only (pacs.009), with the aim of ensuring that their Settlement Accounts are in credit for end of

day and that all queued transactions are settled. All ILFs must be repaid by the end of this period.

7.   Exchange Period for Queued Participants

This period is optional. Only payments with specific Transaction Type Codes (TTCs) are allowed in this period.

8.   Payment Cancellation

CBL System Administrators may launch Gridlock Resolution prior to cancellation of outstanding unsettled payments.

11. Statement Reports

Balance statement reports are sent to CBL's GL (balances remain on the Participant Settlement Accounts until the next Business Day's "Account Housekeeping" period is activated).

Reports on account balances and transaction reports for participants are generated automatically by the System.

12. End-of-Day Reconciliation with Participants

During this period Participants may make enquiries on the System about payments and account balances in order to reconcile this information with their accounting systems, if necessary.

13.   Archiving

RTGS moves the oldest business day data to archive storage.

14.   Enquiry

RTGS remains open for a period in "Read only", during which when participants can send enquiries to the System.

15.   System Stop/End of Day

Connections are interrupted and RTGS is physically stopped.

16.3 Operating Hours

The RTGS operating hours are defined in Annex 8 to these Rules and may be modified from time to time by CBL in consultation with Participants.

17. Error Handling

17.1 General Obligations

In case of a technical failure of a Participant compromising the generation or the reception of payments through RTGS for more than one hour during the day, the Participant shall immediately inform CBL.

If a technical or other failure at a Participant occurs, the Participant may instruct CBL to suspend its account. Account suspension requires confirmation in writing from the Participant and the lifting of such a suspension requires confirmation in writing from the Participant and CBL.

CBL shall inform the Participants in case of a technical failure of the System compromising the Settlement of payments for more than 30 minutes during the Business Day.

The informing notices can be exchanged via free formatted camt.998 messages, secure emails, faxes, or phone calls.

17.2 Telecommunication Failure

In case the connection of a Participant's primary RTGS link via the VPN or the SWIFT network breaks down, the Participant shall notify CBL as soon as possible. The Participant should also within a reasonable period of time start a new connection via their secondary connection. If the Participant is then still unable to send messages to the System, it may:

1. Contact CBL in writing to instruct the latter to execute its most important payments on its behalf via Participant Transfers;

2. Use facilities at another Participant (in the case where Participants have agreed to provide such services to each other).

In such a situation CBL may decide to amend the Daily Operating Timetable for the current day in order to provide sufficient time for all Participants to complete their work for that day, and will notify all Participants accordingly.

17.3 Network Failure

An inability to access the central system via the SWIFT network or the VPN for all or a significant number of Participants effectively prevents the exchange and settlement of payments.

Such a situation will be deemed to have occurred only if CBL advises all Participants to that effect.

CBL can enter important instructions on behalf of a Participant via Participant Transfers or the participant will be advised to come to CBL and use the Desk Service workplace to process the message (s).

In a case a participant sent a payment transaction on its behalf or on behalf of it's customer but the copy of the message was not received by the receiving participant, the sending participant should print the message and should be signed by a senior officer of the participant and hand delivered to the receiving participant for processing.

18.   Compliance Reporting

18.1   General Compliance Rules

Each Participant shall assess its compliance with the functional, technical and organisational features, including security provisions, as specified for RTGS in these Rules.

CBL may require the submission of compliance reports and working documents. Participants shall provide to CBL any information relating to their operation of RTGS that CBL may require within five (5) working days of any request. Failure to supply this information as requested may be grounds for suspension under these Rules.

CBL shall also assess compliance with the above-mentioned features. It is entitled to examine Participants' controls for adequacy and to make the necessary contacts with the auditors of the Participants.

CBL shall subject its own operations to external technical audit.

18.2   Annual Compliance Report

Each Participant must submit to CBL a yearly compliance report, in the form specified in Annex 10, within 60 calendar days of the anniversary of the Participant joining RTGS. The yearly compliance report must be signed by a duly authorised officer of the Participant. Any evidence of that authorisation which is reasonably requested by CBL must be promptly produced to CBL following that request.

19.   Pricing Rules

Participants acknowledge that CBL has the right to set such fees and other charges as shall be notified to Participants from time to time.

1.   CBL will levy an annual membership fee on all Participants, to be effected by a Participant Debit at the start of each calendar year.

2.   RTGS will calculate fees on the basis of Participants' usage, and will charge these fees to Participants' Settlement Accounts.

3.   Additionally CBL may charge penalties for infringement of these Rules, as provided for in these Rules.

4.   CBL may charge transaction processing fees which will be debited to the participant settlement account at the end of every month

Charging will be undertaken at the end of each calendar month, and the Participant hereby authorises CBL to effect Participant Debits for settlement of fees and penalties by the Participant.

CBL will provide Participants with invoices giving details of all charges and penalties at least three days prior to the corresponding Participant Debits being applied.

The same fee structure will apply to all Participants using the same services within RTGS.

CBL may periodically review its fees and charges.

CBL reserves the right to charge a Participant for any additional services rendered specifically to that Participant.

Details of pricing parameters are set out in Annex 11 to these Rules.

20.   Administrative Requirements and Financial Rules

20.1   Audit Trails

RTGS provides comprehensive audit trails, which can be made available to Participants on request at CBL's discretion.

CBL system administrators are able to examine all the activities carried out on the System, including transaction and static data amendments.

For Participants, access to audit trail data will be restricted by use of User profiles. Where an auditor or any other legal entity wishes to access data about another Participant, CBL will require a certified copy of a board resolution of that Participant (or the equivalent corporate authority) authorising the auditors, CBL or this other legal entity to access data about that Participant.

The audit trails provide information:

a)   at application level, showing the path of transactions through the System, the source of all changes to data in the system files and on the databases and providing proof that all transactions received have been processed. The data entry users and approvers for all actions are recorded and are visible on the relevant screens;

b)   at Participant level, showing details of all transactions relating to a particular Participant;

c)   at User level, giving a record of all accesses to the System and the actions of Users, keeping a record of actions by User and showing which Users have taken action on any particular transaction. These elements form part of the technical audit trail known as the System Log;

d)   at technical level, providing a secure record of the technical functioning of the System, recording access to system modules and technical events in detail. This audit trail is referred to as the System Log.

The main audit tools, apart from standard reports, are as follows:

a)   facility to list all transactions for RTGS from on-line history files within the System for at least the previous 7 (seven) years, from postings on the database;

b)   facility to request from CBL User defined reports for audit purposes based on statistical and other tables in the database. CBL may make a charge for the production of special reports.

20.2   Reporting Requirements

CBL may request Participants to provide additional information relating to their payment flows, liquidity and Collateral management.

20.3   Publication of Statistics

CBL will publish monthly and annual statistics on its website concerning the number and value of payments exchanged through RTGS, without identifying individual Participants.

20.4   Conservation and Archiving of Documents

CBL and the Participants must comply with the laws and regulations applicable in Liberia concerning the conservation and archiving of documents as regards the support and the duration of the conservation.

For this purpose, all transactions and accounting data will be stored for a period in accordance with relevant Liberia legislation 7 years. All current transactions and data for the previous 7 years are accessible on-line in real-time. Older data can be accessed at slower speed by requesting CBL to retrieve and load an archive from back-up storage. CBL may make a charge for the latter service.

21. Contingency Event

A Contingency Event is any event which disrupts normal processing to the extent that contingency procedures are brought into effect. CBL shall have the right in its sole discretion to determine and warn Participants that a Contingency Event has occurred. This may or may not include transfer of operations to the RTGS alternate site and/or running RTGS in stand-alone mode, without communication links to other systems.

In case of a Contingency Event, CBL shall have the right, in its sole discretion, to change the Priority of any queued transaction from any Participant in order to facilitate the flow of funds through RTGS, subject to the correct use of priorities as set out in Annex 13 to these Rules. CBL will notify the affected Participant(s) whenever such an operation is performed.

Under these conditions, CBL shall have the right, in its sole discretion, to conduct special reconciliations with Participants including Clearing Houses and to request therefor the necessary transaction and other information from Participants. As a result of reconciliations in a contingency situation, CBL may ask Participants to perform special transactions to ensure that all systems are properly synchronised. In order to comply with BIS *Principles for Financial Market Infrastructures*[2], these transactions must be carried out before End of Day on the affected day.

---

[2] Available at http://www.bis.org/publ/cpss101.htm

22.   Liabilities and Responsibilities

22.1 Force Majeure

There shall be no liability for non-compliance with these Rules to the extent that, and for so long as, there is an inability to perform the obligations under these Rules or these obligations are subject to suspension or delay, due to the occurrence of any event arising from any reason or cause beyond its reasonable control, including, but not limited to, equipment failure or malfunction, acts of God, natural disasters, strikes, labour disputes and acts of war, etc.

The foregoing shall not prejudice the responsibility of all parties to carry out the error handling procedures and other technical operational measures such as those described in section 21 (Contingency Event) in accordance with these Rules, so far as possible, despite the Force Majeure Event, and to use all reasonable efforts to mitigate the effects of any such event whilst it is continuing.

22.2   Responsibilities of the Participants

22.2.1 General Principles

The Participants shall issue their Payment Instructions to RTGS in accordance with these Rules.

If there is a transmission problem, Participants shall contact, as appropriate, either their telecommunications provider or CBL's Help Desk whose details are given in Annex 12. They should monitor the proper progress of their transactions as closely as possible and report any irregularities detected to the Help Desk.

The Participants are individually responsible for:

a)   the correct fulfilment of their obligations resulting from these Rules;

b)   the quality of the data they send on their own behalf and on behalf of their correspondents or customers;

c)   the compliance of the data with the technical protocols and message formats agreed upon;

d)   securing the access to their Monitoring and Control TMON Workplace in accordance with the security procedure under these rules;

e)   ensuring that they collect all data provided to them by RTGS;

f)   controlling the processing of their Payment Instructions until RTGS gives these Payment Instructions the "technically accepted" status;

g)   strictly complying with the Procedures and rules governing access to the System;

h)   ensuring that only duly authorized Users who have been issued with an access control e-token by CBL are using the System.

Each Participant shall be responsible for monitoring throughout the day the Settlement of the payments it has sent, the number and amount of payments stored in outward Queues, any queued net and gross settlement instructions, the balance of its Settlement Account, its ILF and the level of its Reserves.

Each Participant shall aim to avoid having any unsettled payments.

CBL shall not be liable for any loss incurred by a Participant due to a failure on the part of that Participant to monitor and reconcile its payment flows, and each Participant hereby agrees to hold CBL and the other Participants harmless from and against any claim, cost or expense (including legal fees) resulting from their failure to monitor their payment flows and their failure to reconcile.

22.2.2 Correction of an erroneous order

If a Participant becomes aware that its Settlement Account has received a payment erroneously or for an incorrect amount, it must return the payment as specified in 13.3. Likewise, if an Issuing Participant becomes aware of having made an erroneous payment, it should take the initiative in requesting the receiving Participant to make the correction as specified in 13.3.

22.2.3 Access Control

Participants must comply strictly with the Procedures and rules governing access with RTGS. Only duly authorised Users who have been issued with an access control e-token by CBL may use the System.

Participants must regularly review all User access and report annually on this to CBL in the form prescribed in Annex 10.

22.2.4 Obligations for Transactions Performed by Users

Participants are liable for any damage resulting from non-compliance with the Procedures or from improper or fraudulent use thereof and in particular are fully liable for every transaction performed by their Users.

Each Participant shall ensure that its own systems and procedures provide appropriate protection against fraudulent activity in connection with the System.

All actual or suspected fraudulent activity in connection with RTGS must be reported immediately to the Head of Payment Systems Unit at CBL whether

such fraud or suspected fraud is on the part of the Participant's staff or a customer or anyone else. The report should in the first instance be by telephone, followed by written confirmation by email or letter. Each Participant shall provide as much information as possible and all reasonable assistance, whether requested by CBL or any other Participant, to investigate and identify the source of any actual or suspected fraud or suspicious transaction.

22.2.5 Obligations in the Event of Constraining Events

In case of a Constraining Event (i.e. an event which affects the ability of any Participant to participate to the normal and usual extent in sending and receiving payments), the Participant involved must inform CBL immediately and do everything possible to:

a)   identify the irregularity together with CBL;

b)   solve the problem if it is possible for the Participant to do so within its powers and make use of the fallback resources provided, if the need arises;

c)   inform CBL when the problem has been resolved and their system is functioning normally again;

d)   if requested, help CBL to solve any problem affecting RTGS and to return to a normal situation once the problem has been solved.

22.3 Responsibilities and Liabilities of CBL

To the extent consistent with applicable law, CBL shall be liable hereunder only for its failure to act in good faith or to exercise reasonable care, which shall be determined in accordance with the reasonable commercial standards of the banking industry in Liberia. CBL shall not be liable for delay or failure in performance by a Participant or a third party, nor the accuracy (nor shall it be under a duty to verify the accuracy) of any data or instructions provided by a Participant or a third party. Under no circumstances shall CBL be liable for any indirect, incidental or consequential loss (including loss of profit) even if advised of the possibility of such loss.

As System Operator, CBL:

a)   is responsible for checking the Payment Instructions received in accordance with these Rules and the User Manuals;

b)   is responsible for, (once RTGS has technically accepted the Payment Instruction for processing), the integrity, security and confidentiality of a Payment Instruction until it is dispatched to the Addressee.

c)   is responsible for keeping a record of all Payment Instructions according to relevant Liberia legislation;

d)   is not responsible for damage resulting from messages containing errors or for errors which cannot be detected by the checks described in the User Manual;

e)   will take all necessary reasonable measures to protect its computer equipment and to prevent it from being out of order and endeavour to offer as quickly as possible, upon every breakdown or important Constraining Event, a solution to the problem by carrying out the appropriate fall back procedures. If these measures have been taken, CBL is no longer responsible for the possible breakdown or Constraining Event, even temporary, for any reason, of the computers or the programs it uses or places at the disposal of its Participants for the processing of their payments, nor for the destruction or erasing of data stored in the computers or for possible fraudulent use thereof by third parties;

f)   is responsible for making available to the Participants the updated information concerning their payment flows and the status of their Settlement Accounts as generated by the System;

g)   is responsible for providing a first level Help Desk to support the operation of the central system and the Monitoring and Control TMON Workplace in normal circumstances.

The liabilities of CBL as Technical Operator are limited to:

a)   the correct operating of the System as described in the User and Technical Manuals;

b)   securing by means of adequate devices and procedures the System as regards data integrity, availability and confidentiality;

c)   provision of adequate capacity to meet the system performance requirements of the contracts between CBL and Participants;

d)   endeavouring to solve without delay, and in close co-operation with the hardware, software and/or service providers, any failure or malfunction of the System.

CBL shall not be liable for any failure of RTGS resulting from the incorrect use of the System by the Participants or due to software errors or communication failures. Except as provided in this section, CBL shall have no liability whatsoever to any Participant or any other person for any loss, liability, or expense suffered by such Participant or person arising from Participant's acts or omissions in connection with RTGS.

CBL's operational responsibilities are defined in a Service Level Agreement (SLA) which CBL will execute with each Participant.

22.4   Claims and Compensation

22.4.1 Arising from the System

CBL shall in case of a failure or a malfunction raise claims as foreseen in the contracts signed with its counterparts. These sums will be repaid to the Participants proportionally to the direct financial loss they have suffered.

22.4.2 Arising from a Participant

Any loss incurred due to a fraudulent transfer originating at a Participant shall be borne by such Participant.

If a sending Participant requests that a receiving Participant returns the amount of a Payment Instruction because of an error in the Payment Instruction made by the sending Participant (such as a duplicate message, misdirected payment, incorrect amount, etc.), the receiving Participant must return the amount of the Payment Instruction to the sending Participant in accordance with 13.3 and 22.2.2.

22.5 Administrative Fees

CBL may impose administrative fees on Participants that do not comply with the provisions of these Rules, in particular the security provisions and the handling procedures specified here above. These fees shall be determined from time to time by CBL.

23.   Dispute Resolution

23.1 Law and Jurisdiction

These Rules are subject to Liberia law.

In case of a dispute between Participants or between Participants and CBL, the respective rights and obligations in relation to Payment Instructions processed through RTGS, and all other matters referred to in these Rules, shall be determined according to the laws of Liberia and the provisions contained in the rules and procedures referred to in these Rules and Annexes.

23.2 Conciliation and Arbitration Procedures

23.2.1 Conciliation Procedure

In case of operational error, questions or differences whatsoever at any time, the Participants concerned shall sit together in order to find an amicable settlement and take all necessary measures to that effect.

If Participants do not agree to find such an amicable settlement, each Participant concerned shall request CBL in writing 10 calendar days at the latest after the occurrence of the error or dispute, to start a conciliation procedure in order to find a solution concerning the error or the dispute, its consequences and damages.

The Participants concerned shall communicate to CBL all necessary information and documentation to this effect.

23.2.2 Arbitration Procedure

Where the foregoing procedures do not resolve the dispute, the parties may proceed to Arbitration. An "Arbitration Panel" shall be constituted to rule on and settle disputes between Participating DFIs. The Panel will comprise three natural persons, technically knowledgeable in the matter in dispute or appointed respectively by the claimant and the respondent, and the third, an umpire shall be selected by the two Arbitrators so appointed. No person appointed as an Arbitrator shall be an employee or an officer or the spouse of an employee or officer of a Participant, nor a pensioner or the spouse or widow/widower of a pensioner nor shall an arbitrator be interested in any matter in dispute.

The Arbitration Panel once established shall form its own rules. The decision of the Panel shall be binding on the parties. The Arbitration shall be held as a matter of urgency, at a time and place decided on by the duly appointed Panel, with a view to being completed within fourteen (14) days after the establishment of the Panel. Each party shall be entitled to be represented at the

Arbitration by its Attorney(s)-at-Law and shall be entitled to produce such evidence and call such witnesses as it deems relevant.

The Arbitration Panel may order payment by one or more of the parties of the amount of the Item(s) in Dispute, any interest claimed and any arbitration costs allocated as it deems appropriate. The Arbitration Panel shall not order the payment of any indirect, consequential, punitive or other damages. The order shall be binding on the parties and payment shall be made within five business days after the Award is given to the parties notwithstanding an appeal.

24.   Insolvency of a Participant

24.1   Notification of Insolvency Events

A Participant must notify the Banking Supervision Department of CBL immediately upon becoming aware of:

a)   any Insolvency Event in respect of itself;

b)   any reasonable grounds to suspect that any other Participant is insolvent.

For the purposes of a) and b), 'insolvency' is to be read as meaning that the relevant Participant is not able to pay all its debts as and when they become due and payable.

Upon receiving any notification under a), CBL will promptly notify all other Participants. These notifications will comply with the conditions set in Annex 14 to these Rules.

Upon receiving any notification under b), CBL will promptly make enquiries of the Participant in respect of which insolvency is reported to be suspected and, if the relevant Participant is prudentially supervised by an entity other than CBL, the relevant supervisor. To the extent that an Insolvency Event is admitted by the relevant Participant and that fact is communicated to CBL, CBL must promptly notify all other Participants.

The provisions of section 3.2.1 (suspension) or 3.2.2 (termination) may apply as a result.

24.2   Arrangements upon Notification of an Insolvency Event before the Occurrence of the Decision Marking the Commencement of the Insolvency Event

Upon being informed of the fact that a Participant has admitted an Insolvency Event pursuant to section 24.1, CBL will make the following arrangements:

24.2.1 Payment Instructions submitted by the Insolvent Participant after reporting or admitting an Insolvency Event

For Participants that still have an account with CBL after the occurrence of an Insolvency Event, CBL will take all reasonable steps to ensure that, except with the consent of the appointed trustee, no further Payment Instructions are presented to RTGS for Settlement by the insolvent Participant with CBL, except for certain DNS File transactions as described under section 24.2.4 of these Rules. The suspended or excluded Participant remains however bound by the obligations resulting directly or indirectly from its participation in RTGS.

24.2.2 Payment Instructions submitted by the Insolvent Participant that have been technically accepted by RTGS but have not yet been accepted for settlement at the moment RTGS is informed of the Insolvency Event

For all Payment Instructions submitted by the insolvent Participant that have already been technically accepted by RTGS, but have not yet been accepted for Settlement by RTGS in accordance with section 11.1 of these Rules at the moment RTGS is informed of the Insolvency Event, CBL will take all reasonable steps to cancel them, except for certain DNS File transactions as described in section 24.2.4 of these Rules.

24.2.3 Payment Instructions submitted by the insolvent Participant that have been accepted for Settlement by RTGS at the moment RTGS is informed of the Insolvency Event

The Participants expressly acknowledge that the procedure for processing the Payment Instructions described in sections 10 and 11 of these Rules continues to apply despite the Insolvency Event. This means among other things that the Payment Instructions that have been accepted for Settlement by RTGS before the announcement of the Insolvency Event are final.

24.2.4 Settlement of DNS File transactions received from Clearing Houses

All Payment Instructions submitted by an insolvent Participant that have not yet been accepted for Settlement by RTGS in accordance with section 11 of these Rules at the moment of the Insolvency Event will be refused or cancelled by CBL, except for DNS Files containing credit or debit positions of the insolvent Participant, received from Clearing Houses and accepted for Settlement by DNS in accordance with the provisions of section 7 of these Rules, before or during the operating day of the decision making the commencement of insolvency proceedings or reorganisation measures but before the decision making that commencement and that are fully collateralised. CBL shall have the right, in its sole discretion, to make exceptions to this rule.

Participants hereby explicitly acknowledge that, in order to limit the settlement risks that might arise in net settlement systems following an Insolvency Event, CBL may, in its sole discretion, change the processing order of a queued DNS File in such a way that, as far as possible, unwinding of its operations is avoided. For the same reason and with the same objective in mind, CBL may also set off the balances with Available Funds on account and, as the case may be, by means of an ex officio retention from an actual credit line (in the sum of the available securities) that have been accorded to the Participant by CBL.

Exercise or otherwise of this possibility does not entail any liability whatsoever for CBL vis-à-vis the Participant in question or vis-à-vis any other Participant.

24.3 *Notification of the Decision Making the Commencement of the Insolvency Proceedings*

In accordance with The Central Bank of Liberia Act 1999, the relevant court, which, according to Liberia law, takes the decision of opening an insolvency proceeding against a Participant, shall immediately notify that decision to CBL.

Upon receipt of such notification, CBL will immediately notify the System Operator (i.e. the Department of CBL responsible for RTGS operations) about the decision to open the insolvency proceedings in accordance with The Central Bank of Liberia Act 1999.

24.4 *Arrangements in case of notification of the decision marking the commencement of insolvency proceedings during the operating day*

If the decision marking the commencement of insolvency proceedings occurs during the day, the following arrangements are made from the time of receipt thereof:

a) Payment Instructions submitted by the insolvent Participant after the notification of a decision marking the commencement of insolvency proceedings with respect to that Participant are prevented from being entered into RTGS by setting the insolvent Participant to Blocked status first, to enable positions of that Participant that have been accepted for Settlement to be cleared up and then setting Inactive status, to the extent that this has not yet been done pursuant to section 24.3 of these Rules, except for certain DNS File transactions as described under (e) below.

b) Payment Instructions submitted by the insolvent Participant that have been technically accepted but have not yet been accepted for Settlement at the moment of the notification of the decision marking the commencement of insolvency proceedings with respect to that Participant are refused, except for certain DNS File transactions as described under (e) below.

c) Payment Instructions submitted by the insolvent Participant that have been accepted for Settlement by RTGS at the moment of the notification of the decision marking the commencement of the insolvency proceedings with respect to that Participant are final and have to be settled by RTGS.

d) DNS Files from Clearing Houses containing Participant debits and credits accepted for Settlement by DNS that are fully collateralised, before or during the operating day of the decision marking the commencement of insolvency proceedings or reorganisation measures but before the decision marking that commencement, that are presented to RTGS on the day RTGS is notified of a decision marking the commencement of insolvency proceedings with respect to that Participant are settled by RTGS.

e)   The commencement of insolvency proceedings against a Participant shall not prevent:

    i.   funds available on the Settlement Account or securities available on the Securities Account of that Participant from being used to fulfil that Participant's obligation in RTGS before or on the day of the decision marking the commencement of the Insolvency Proceedings;

    ii.   Funds blocked on the Settlement Account or in the relevant RTGS reserve and securities blocked on the Securities Account of that Participant in favour of RTGS from being used to fulfil that Participant's obligation in RTGS before or on the day of the decision marking the commencement of the insolvency proceedings.

24.5   Notification of the decision marking the commencement of insolvency proceedings at the end of the operating day

If the order or decree marking the commencement of insolvency proceedings occurs after the daily closing but before the beginning of the next Business Day, CBL makes the necessary adaptations in RTGS before the start of the next Business Day.

If this concerns a Participant, CBL adjusts the IT parameters of RTGS so that the Participant in question can no longer issue or receive Payment Instructions (i.e. the Participant status is set as Blocked or Inactive in The System).

CBL will advise Participants of the Insolvency Event before the start of the next Business Day.

24.6   Suspension or termination on grounds other than an Insolvency Event

The procedure for immediate termination of a Participant's activities on grounds other than an Insolvency Event is identical to that in the case of an Insolvency Event.

As soon as the suspension has been lifted, CBL ensures that the Participant is treated normally again from the beginning of the next Business Day.

25.   Amendment to the Rules

CBL is responsible for the amendment from time to time of these Rules or the Annexes hereto, or any additional documents containing, *inter alia*, technical provisions and specifications for RTGS, after consultation with Participants. At any time Participants may suggest amendments to CBL which will consider them and may, in consultation with all Participants, apply them with the agreement of Participants.

Such amendments and additional documents shall become effective as an integral part of these Rules as per the date specified by CBL, which date shall not precede agreement with the Participants. CBL will give notice to each Participant of any modification 30 calendar days before its entry into force.

Annex 1: BICs

BICs

Bank	BIC
Central Bank of Liberia	CBLRLRLM
Liberia Bank of Development and Investment	LBDELRLM
International Bank of Liberia	IBLRLRLM
Ecobank of Liberia (Limited)	ECOCLRLM
Global Bank of Liberia (Limited)	PHBXLRLM
Guaranty Trust Bank of Liberia (Limited)	GTBILRLM
Access Bank of Liberia (Limited)	ACLILRLM
United Bank Africa (Liberia Limited)	UNAFLRLM
Afriland Bank of Liberia (Limited)	CCEILRLM
GN Bank (Limited)	GNERLRLM

Annex 2: Participant Application Form/Agreement

This Agreement shall form part of and be incorporated in the Rules and therefore the terms and conditions set out in the Rules shall unless otherwise excluded or varied hereunder, apply to this Agreement. In the event of a conflict, the terms of this Agreement shall prevail. Unless otherwise specified herein all words and phrases defined in the Rules shall have the same meaning in this Agreement.

Authority

The Participant hereby represents and warrants as of the date that any part of this Agreement is executed and any Service is used or delivered that:

i.   it is duly organised, validly existing and in good standing in every jurisdiction where it is legally required so to be;

ii.   it has the power and authority to execute and deliver, and to perform its obligations under, the Agreement;

iii.   the Agreement is duly authorised, executed and delivered and is its enforceable, legal, valid and binding obligation.

iv.   all necessary consents, authorisations and instructions have been provided to and/or by each third party, if any, involved in reporting, receiving or transmitting instructions, funds transfers and/or data in connection with these Services;

v.   all necessary approvals, authorisations and consents, if any, have been obtained and all necessary filings or registrations have been made (and the same will be renewed if necessary) as are required by any governmental or other authority in connection with the execution and performance of the Agreement; and

vi.   the performance of the Agreement and delivery and use of the Services will not violate or offend any applicable requirement, law, decree, regulation, order or judgment.

Upon request by CBL, the Participant agrees to supply CBL with copies of any such consents, instructions and authorizations required of the Participant under (iv) or (v). The Participant further agrees to immediately notify CBL if it suspects or knows of any circumstances that could or would cause a breach of any representation or warranty hereunder.

Authorised Persons

The Participant shall deliver upon execution of this Agreement and from time to time, as appropriate, the names and specimen signatures of at least three persons duly authorised to access data and to provide instructions with respect to bank accounts, funds transfers and other financial transactions by electronic means ("instructions"), and/or to designate persons to access such data and to provide instructions, on behalf of the Participant in connection with the Services and the limitations, if any, upon such authority (each, an Authorised Person), accompanied by a certificate signed by the appropriate officer, or equivalent documentation, attesting to the authorisation of each Authorised Person and the authenticity of the signature. The Participant hereby authorises CBL to act in reliance thereon in executing instructions.

Any change in the name or other relevant information about Authorised Persons shall be delivered to CBL at least 15 days prior to the effective date of such change.

RTGS Application Form

<table>
<tr>
<td colspan="3" align="center">Application to Join RTGS</td>
</tr>
<tr>
<td align="right">To:</td>
<td colspan="2">The Head, Payment Systems Department
Central Bank of Liberia</td>
</tr>
<tr>
<td align="right">From:</td>
<td>Name of Applicant:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Place of Incorporation:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Liberia Company Registration Number:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Registered Office Address/ Principal Place of Business in Liberia:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SWIFT BIC:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Name of Contact Person:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Telephone Number:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fax Number:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E-mail:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Preferred Start Date:
<i>(This is the preferred date on which the Applicant wishes to be admitted as a Participant of RTGS.)</i></td>
<td></td>
</tr>
</table>

The above named body corporate ("Applicant") hereby applies for membership as a Participant in RTGS. The Applicant agrees that if this application is accepted then subject to and in consideration of that acceptance:

1.   The Applicant will observe and comply with the System Rules of RTGS and the procedures detailed in the User Manual (as defined in those Rules) in force from time to time. The Applicant hereby acknowledges receipt of a copy of the System Rules and the User Manual as currently in force.

2.   The Applicant will observe and comply with the requirements and directions of RTGS and any relevant statutory authority in force from time to time relating to RTGS.

3.   The Applicant undertakes not adversely to affect the integrity of Payment Instructions sent and received between Participants or the settlement of those Payment Instructions (or otherwise introduce a significant new risk into RTGS after becoming a Participant).

4.   The Applicant undertakes not to impair the overall efficiency of RTGS after becoming a Participant.

5.   The Applicant undertakes to pay the fees and other amounts payable under the Rules by a Participant.

6.   The rights and obligations contained herein shall ensure not only to RTGS, but also to every other Participant who has agreed to observe and comply with the System Rules and User Manual.

7.   The Participant hereby authorises CBL to manage its accounts with CBL for the purpose of the proper functioning of RTGS.

8.   The following information is enclosed with this application to demonstrate that the Applicant satisfies the applicable requirements for participation:

[*list information and documents enclosed with the application*]

Terms not defined in this application have the same meaning as in the System Rules for RTGS.

Dated:	
EXECUTED by THE APPLICANT By or in the presence of:	
(Signature of Secretary/Director)	(*Signature*)
(Full name of signatory)	(*Full name of signatory*)

Annex 3: Form for Participant Addition or Modification

Application to Add or Change a Participant in RTGS		
To:	The Head, Payment Systems Department Central Bank of Liberia	
From:	Name of RTGS Participant:	
	Place of Incorporation	
	Liberia Company Registration Number:	
	Registered Office Address/ Principal Place of Business in Liberia:	
	Complete the following details about the way you want your organization's details held in RTGS	(strike out whatever is not appropriate)
	Requested action:	Add / Change
	Participant Name:	
	Participant address:	
	SWIFT BIC:	
	Name of Contact person::	
	Telephone no:	
	Fax no:	
	Debit advice required:	Yes / No
	Credit advice required:	Yes / No
	Statement required:	Yes / No
	Billing statements to be sent:	None / Daily / Weekly / Monthly
	Approving officer's title:	
	Signature:	
Dated:		

EXECUTED by THE APPLICANT By or in the presence of:	
(Signature of Authorised Signatory	(*Signature*)
(Full name of signatory)	(*Full name of signatory*)

Annex 4: User Application Form

(For a New User, to change the details of an existing User or to unblock a Blocked User)

Application to Add / Change the details of / Unblock a User in RTGS	
To:	The Head, Payment Systems Department Central Bank of Liberia
From:	Name of RTGS Participant	
	Registered Office Address/ Principal Place of Business in Liberia	
	Name of Contact Person:	
	Telephone Number:	
	Fax Number:	
	E-mail:	
	Complete the following details about the User If a new user, also complete a User Profile Request Form	(strike out whatever is not appropriate)
	Requested action:	**Add / Change details / Unblock**
	User's surname:	
	User's forename:	
	*RTGS Username;	
	User's work title:	
	User's place of work (address):	
	Approving officer's title:	
	Signature:	

The required rules for forming Usernames (e.g. first 4 characters to identify the Participant's SWIFT BIC, followed by another 4 characters to identify the system name "RTGS" and 2 characters to identify the machine name followed by 1)

The above named individual ("Applicant") who is an employee of the Participant named above, hereby applies for User access to RTGS. The Applicant agrees that if this application is accepted then subject to and in consideration of that acceptance:

i.   The Applicant will observe and comply with the System Rules of RTGS and the procedures detailed in the User Manual (as defined in those Rules) in force from time to time. The Applicant hereby acknowledges receipt of a copy of the System Rules and the User Manual as currently in force.

ii.   The Applicant will observe and comply with the requirements and directions of CBL and any relevant statutory authority in force from time to time relating to RTGS.

iii. The Applicant undertakes not adversely to affect the integrity of Payment Instructions sent and received between Participants or the settlement of those Payment Instructions (or otherwise introduce a significant new risk into RTGS after becoming a User).

iv.   The Applicant undertakes not to impair the overall efficiency of RTGS after becoming a User.

The rights and obligations contained herein shall apply not only to RTGS, but also to every other Participant and Participant End User who have agreed to observe and comply with the System Rules and User Manual.

The Applicant hereby requests CBL to set up the Applicant's User Profile as requested in the attached User Profile Request Form for the purpose of performing the selected RTGS functions.

This Application Form is countersigned by the employing Participant's Security Administrator to acknowledge that the Applicant is an Employee of the Participant and that the Application is fully supported and endorsed by the Participant and that the Applicant acts under supervision of and on instructions from the Participant:

Terms not defined in this application have the same meaning as in the System Rules for RTGS.

Dated:	Dated:
SIGNED **BY** THE APPLICANT	SIGNED **by** THE PARTICIPANT SECURITY ADMINISTRATORS
(Signature of Applicant)	*(Signatures of Participant Security Administrators)*
(*Full name of Applicant*)	(*Full names of Participant Security Administrators)*

Annex 5: RTGS User Profile Request Form

The appropriate User Profile Request form must be completed to request the Participant Security Administrator to create or change a User Profile, or to request the CBL to change a Participant Master Profile:

▪   User Profile Request form – CBL User

▪   User Profile Request form – Participant Bank user

An example of each form is to be set out on the following pages.

Annex 6: RTGS User Suspension/Deletion Request Form

(Use to Block or Remove a User)

Application to Block or Remove a User in RTGS		
To:	The Head, Payment Systems Department Central Bank of Liberia	
From:	Name of RTGS Participant	
	Registered Office Address/ Principal Place of Business in Liberia	
	Name of Contact Person:	
	Telephone Number:	
	Fax Number:	
	E-mail:	
	Complete the following details about the User	(strike out whatever is not appropriate)
	Requested action:	**Block/Remove**
	User's surname:	
	User's forename:	
	User's identity number:	
	User's work title:	
	User's place of work (address):	
	User Name (as registered in RTGS):	
	Approving officer's title:	
	Signature:	

We hereby apply for the User access to RTGS for the user named above to be:

- **blocked }**

     } strike out whichever is not applicable

- **removed }**

	Dated:
	SIGNED by **THE PARTICIPANT SECURITY ADMINISTRATORS**
	(*Signatures of Participant Security Administrators*)
	(*Full name of Participant Security Administrators*)

Annex 7: Settlement Account Reserves

Purpose	Reserve in RTGS	Automatically transfer reserve to Available Funds
ACH	Yes	After settlement
SSSS	Yes	After settlement
SWITCH	Yes	After settlement

Annex 8: Daily Operating Timetable

Time	Event	Activities by Participants and Available Transactions
Before or 8:00 am	System Start	▪ The System is open in offline mode for testing of connections.
8:35 am	Account Housekeeping	▪ CBL Housekeeping period.
9:00 am	Start of Morning Exchange Period	▪ Participants exchange payments.
15:00 pm	Settlement of ACH DNS File	▪ ACH DNS File is received and settled. Particpants must make sure to have sufficient funds in the Settlement Accounts to cover any anticipated debit position.
15:30 pm	Start of Afternoon Exchange Period	▪ Participants exchange payments.
16:30 pm	Start of Evening Exchange Period (First Cut-off)	▪ RTGS will accept only interbank transfers (pacs.009) and will reject all others.
16:55 pm	Start of ILF Reversal Period	▪ CBL System Administrators may launch Gridlock Resolution; ▪ ILF reversals are carried out; ▪ Partial ILF reversals are carried out; ▪ Unsettled payments are cancelled at the end of this period.
17:00 pm	Payment Cancellation	▪ RTGS Central System to cancel all payments in queue
17:02 pm	Start of Evening Administration Period (Final Cut-off)	▪ Balance statement reports are sent to CBL's GL; ▪ Participant statements are gene-rated; ▪ Participants may make enquiries and download reports for recon-ciliation purposes; ▪ RTGS moves oldest business day data to archive storage.
17:10 pm	Start of Close-Down Period (End of Day)	▪ RTGS remains open in read-only mode for Participant enquiries
17:12 pm	Archieving	▪ System backup of data files
17:30 pm	System Stop	

Annex 9: RTGS Validation Codes

System-generated RTGS Error Codes are:

Error Code	Error

Annex 10: Annual Compliance Report

Participant: [Name]

Self-Assessment for [Year]

Please respond to the following questions

A.   Review of User access

1)   Have you reviewed the access levels and rights (User Profiles) of all your RTGS Users?

2)   Are you satisfied that all Users continue to have the correct access levels and rights?

B.   RTGS-related fraud

1)   Has your organization experienced any RTGS-related actual or attempted fraud during the year?

2)   If so, was this reported to CBL in accordance with the RTGS System Rules?

3)   Was the means of the fraud identified and rectified?

4)   Did the fraud result in any financial loss to your organisation or to its customers?

5)   If so, is recovery still being sought?

C.   Contingency planning and contingency facilities

1)   Does your organization have a documented contingency plan for its RTGS operations?

2)   Does the plan satisfactorily cover significant potential contingency scenarios?

3)   Does your organization maintain fallback computer facilities and/or communications for the SWIFT and/or VPN interface(s) used for RTGS communications?

4)   If your organization does maintain a fallback computer facility, is it at a separate site to your main computer facility?

5)   Are you satisfied that potential business risks have been analysed and addressed?

D.   System down time and resilience

1)   Have your RTGS operations been subject to significant or recurring downtime or disruption?

2)   If so, were these reported to CBL and recorded in a Contingency Event Log in accordance with the RTGS procedures?

3)   Are you satisfied that your RTGS-related systems have sufficient capacity and resilience to service your RTGS payment traffic in a timely and safe manner?

Annex 11: Pricing

This Annex sets out the pricing parameters and the prices in force at the time of issue of the current version of the RTGS System Rules.

Participants' Settlement Accounts will be debited three working days following production and presentation of invoices.

<u>Parameters in pricing</u>

Annual membership fee

RTGS payments (per payment):

- Morning exchange period
- Afternoon exchange period

<u>Sanctions and penalties</u>

1. To pay fines when in violation of the rules
2. Suspension
3. To make an account inactive

<u>Categories of transactions to which surcharges may be applied and the pricing of these surcharges</u>

Inward remittances: from participants other than CBL

1. MT202
2. MT103
3. MT102

Annex 12: Help Desk

Procedure for contacting the RTGS Help Desk

All requests for assistance or reporting of difficulties, suspected faults or technical problems should be communicated to the RTGS Help Desk via telephone, email or fax.

Contact details for the RTGS Help Desk are:

Name: Mohammed B. Varney
Telephone: 0888467988/0770389568
Fax:
email: mbvarney@cbl.org.lr/mvarneylib@yahoo.com
                Postal address:
                Central Bank of Liberia
                P.O. Box 2048,
                Corner of Ashmun and Lynch Streets
                Monrovia, Liberia

Name: Hannah Mercy Richards
Telephone: 0886845921/0777245155
Fax:
email: hmrichards@cbl.org.lr
Postal address:
Central Bank of Liberia
P.O. Box 2048,
Corner of Ashmun and Lynch Streets
Monrovia, Liberia

Name: Kormassa S. Ngaima
Telephone: 0880951621/0881075269/0778951621
Fax:
email: ksngaima@cbl.org.lr

Postal address:
Central Bank of Liberia
P.O. Box 2048,
Corner of Warren and Carey St
Monrovia, Liberia

Annex 13: Message Priorities

Priority	Transaction Type/Class
1	Exceptional Priority, used by System Administrator under exceptional and urgent circumstances only.
2 - 3	DNS Files created by external Clearing Houses.
4	ILF and ILF redemption operations.
5	Securities transactions (Cash leg of DvP) received from <CSD>.
6 – 9	CBL transactions.
11 – 20	Urgent Participant transfers.
21 – 49	Normal Priority Participant transfers.
50 - 98	Low Priority Participant transfers.
99	Payments in Settle-or-Reject mode.

Annex 14: Notification

Any notice pursuant to these Rules shall (unless otherwise specified) be conveyed by mail, e-mail, fax or delivery by messenger, and shall be effective only upon receipt.

Any such notice shall be:

1.   Mailed or delivered to:

        Central Bank of Liberia
        P.O. Box 2048,
        Corner of Warren and Carey St
        Monrovia,
        Liberia

2.   Or emailed to: mokuteh@cbl.org.lr/mbvarnye@cbl.org.lr/hmrichards@cbl.org.lr

3.   Or faxed to: <xxx>

4.   Contacts:+231888467988/+231886510499/+231776510499/+231886845921

Central Bank of Liberia may notify the Participants In Writing of any changed or additional addresses.

Annex 15: Technical Documentation

CBL / CMA to provide list of all applicable documentation, with version numbers and dates

Annex 16: Monitoring and Control TMON Workplace Configuration

Each Participant will have at least one Operator machine, one controller machine for connection to SWIFT Network or VPN as follows:

1.   Hardware Configuration

- Aladdin eToken USB

Minimum:

- Any PC capable of running the supported browser

- 1 USB port

Recommended:

- 1 GB RAM (WinXP) or 2 GB RAM (Vista, Win7)

- Screen with 1024x768 resolution or above

- 1 USB port

2.   Software Configuration

- Windows XP, Windows Vista or Windows 7

- Internet Explorer 7 or above; Firefox 3 or above

- Antivirus software

- Aladdin eToken PKI client software

Annex 17: Transaction Type Codes

TTC Code	TTC Type
000	System operations.
001	Ordinary transfers.
002	Cash withdrawal operations.
003	Cash deposit operations.
004	Reserved for future use.
005	Reserved for future use.
006	DvP operations.
007	ILF operations.
008	Securities trading operations.
009	Decreasing reserve. This operation is not currently used, but the TTC is reserved for future use.
010	Coverage net debit position.
011	Reserved for future use.
012	Clearing transaction from clearing system.
013	General Ledger transaction (CBL internal use).
014	Return transaction.
015	ILF redemption. This operation is Initiated from CSD (or by participant in case of early redemption).
016	Collection of fees.
017	Collection of penalties.
018	Interbank repo.
019	Interbank repo maturity.
020	ILF return on behalf of other participant.
030	Direct Debit.

Approved:_____
                    EXECUTIVE GOVERNOR