THE BANK OF ZAMBIA CENTRAL SECURITIES DEPOSITORY SYSTEM RULES

Bank of Zambia

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1. General Principles and Objectives

1.1.   General

The Central Securities Depository (CSD) Rules are issued in accordance with the Loans and Guarantees (Authorisation) Act Cap 336 of 1996 which gives Bank of Zambia (BoZ) the agency role in the issuance of Government Securities and the BoZ Act No 43 of 1996, Section 4 which gives the Bank authority to implement monetary policy. Further, for the secondary market trading of Government bonds, the Rules are guided by the Securities Act No 41 of 2016. Furthermore, these Rules are issued in line with the latest Operating Rules and Guidelines for Government Securities Transactions, Open Market Operations (OMO) and the Overnight Lending Facility (OLF).

The CSD is the BoZ Government Securities Registration and Settlement System, which is integrated with the Zambian Interbank Payment and Settlement System (ZIPSS). The CSD maintains the primary record of ownership and settles transactions, on the instructions of Participants, in securities issued by the BoZ and other eligible issuers.

Participants of the CSD operate accounts within the CSD on their own account or on behalf of their clients. Participants may hold client accounts at an individual client level or on a consolidated basis that is a single account which includes securities for more than one client. Transactions may be settled free of payment or on the basis of delivery versus payment, through a link with ZIPSS. This link ensures the final (and irrevocable) gross settlement of transactions in accordance with the recommendations of the Committee on Payment and Settlement Systems (CPSS)[1].

The Participants act in their own name and are responsible for the timely settlement of all transactions including those belonging to their clients. In order to become a Participant, an entity shall comply with the criteria on operational capacity, financial soundness, legal soundness and financial requirements, as may be applicable, as detailed below in Rule 3-Access Criteria and Conditions. 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. Any of these documents may be amended from time to time. If there is a conflict between these Rules and any Annex, the terms of the Annex shall prevail. All time indications in these rules relate to the time at the head office of the BoZ.

The specific terminology relating to the CSD and the acronyms used are explained in the Glossary in Annex 1 to these Rules.

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1.   [1] www.**bis**.org/publ/cpss101a.pdf

1.2   Role of the Bank of Zambia

BoZ is the System Operator of the CSD, that is, it is the entity with the legal responsibility for controlling, managing and operating the CSD. BoZ is also a Technical Operator and as a central bank it is a participant in the CSD.

In its capacity as System Operator, BoZ shall be responsible for the authorisation to participate in the CSD; the establishment and maintenance of these Rules and Procedures; and the authorisation of operating standards and procedures of the CSD. BoZ will control the correct execution of these Rules by the Participants.

As the central bank, BoZ holds securities on its own behalf, settles transactions it has executed on the secondary market (as part of its OMO) and mainly manages liquidity in the market under a repo arrangement. In this vein, it is the issuer of OMO instruments and the manager of securities issued by the Zambian Government.

BoZ is also the Technical Operator of the CSD. BoZ, as Technical Operator, will administer the operation of the daily business cycle, manage the creation of reports and charts and will be responsible for the security of CSD data, software and infrastructure, including managing backups and fallback situations.

BoZ can, at its own discretion, delegate operational tasks to third parties. This delegation does not affect BoZ's responsibility towards the Participants for the activities concerned.

1.3   Delivery versus Payment

Most of the transactions in the CSD will be settled under the Delivery versus Payment (DvP) basis. DvP shall be in compliance with the recommendations of the CPSS. The CPSS defines DvP as "a mechanism in an exchange-for-value settlement system that ensures that the final transfer of one asset occurs if and only if the final transfer of (an) other asset(s) occurs. Assets could include monetary assets (such as foreign exchange), securities or other financial instruments.

2 Eligible Securities

2.1 Basic Structure

Securities which are exclusively issued in book entry form and are either freely or not freely transferable are eligible for holding within the CSD.

Any provisions in the issue documentation or any agreement, instrument deed or record relating to the securities shall be compatible with the provisions, procedures and mechanisms set out in these Rules.

Where any right, benefit or privilege attaching to or arising from the security is to be exercisable through the system, the mode of exercise must be valid and effective under the terms of the security issue documentation and comply with any other legal or regulatory requirement, which may from time to time apply to the exercise or such right, benefit or privilege.

2.2 Issuers

Securities issued by the following issuers are eligible for holding and settlement in the CSD: the Government of the Republic of Zambia, BoZ, and other issuers at the discretion of BoZ, provided that the securities to be issued meet the basic structure defined.

2.3 Primary Register

The record of ownership, held within the CSD, is recognised by the issuers as the primary register for ownership rights in respect of the securities which are eligible for holding and transfer within the system.

2.4 Issuance

Securities may be issued either at the nominal value of the security; at a discount to the nominal value; or at a premium to the nominal value.

2.5 Redemption

There is no upper or lower limit on the period of redemption for securities held within the CSD. Securities shall be redeemed at their nominal value on the nominated redemption date unless a full or partial redemption has occurred prior to that date in accordance with the terms of issue of the security.

2.6 Discount/ Interest /Coupon

The following types of securities may be held and settled within the CSD:

   (a) Discount Securities: no component of the discount interest shall be paid during the life of the security.

(b) Interest Securities: only one payment of interest is made together with the redemption payment.

(c) Coupon Securities: there are several payments of interest during the lifetime of the security as determined by the payment timetable in the CSD.

Interest on coupon securities may be paid once, twice, three, four, six or twelve times a year. Securities within the CSD may pay interest at a fixed rate or a variable rate.

2.7 Ownership Restrictions

The ownership of securities within the CSD may be restricted in accordance with the terms of issue of the security. This applies to callable securities and other securities issued with various terms and conditions.

2.8 Security Identification

Securities within the CSD shall be identified by an International Securities Identification Number (ISIN) code and other unique identifiers (UIDs). Both Treasury bills and Government bonds will have ISINs while OMO and other instruments will have UIDs.

2.9 Setting up Standing Data and Payment Events

The CSD shall automatically create a record giving details of each security when the results of an auction or a private placement are successfully processed.

Once the record is created, BoZ System Administrators may amend the data fields associated with the calculation of the daily value. The CSD shall also create a standing data record for future payment events associated with that security.

2.10 Information for Participants

In accordance with Section 15.2 of these Rules, Participants are able to view:

(a) an updated list of eligible securities,

(b) standing data related to payment events,

(c) statements of holdings,

(d) award and interest payment notices and

(e) other statements.

2.11 Managing Static and Historical Data

BoZ System Administrators may amend details of securities and payment events and remove matured issues from the CSD. The CSD shall retain a history of such changes with the identity of the BoZ Administrator involved. These matured issues are removed when they are no longer required to appear in any query or report in line with the BoZ retention

period. However, the system will retain in the database all the history of the static data and transactions performed on any security.

3 Access Criteria and Conditions

3.1 Categories of Participants

The following classes of entities may participate in the CSD:

(a) Commercial Banks

(b) Merchant Banks

(c) Central Bank

(d) Insurance Companies

(e) Pension Funds

(f) Stock Exchanges

(g) Other Financial Institutions

(h) Government Agencies

(i) Private Companies

(j) Private Individuals

(k) Parastatal Organisations

(l) Charitable Organisations

(m) Other Authorised Entities

In accordance with the relevant laws and regulations, the BoZ may authorise other Participants on a case by case basis. These are classified as either Primary Participants or Secondary Participants depending on their accessibility to the CSD.

Primary Participant: These are Participants who have Virtual Private Network (VPN) connectivity to the CSD system and may participate directly in an auction on their own account or on behalf of their clients.

Primary Participants must fall under the following classes:

(a) Central Bank

(b) Ministry of Finance

(c) Government Agency

(d) Bank

(e) Merchant bank

(f) Financial Institution

(g) Insurance Company

(h) Pension Fund

(i) Stock Exchange

 (j) Parastatal Organisations

Participants in these classes can be collapsed into three groups in accordance with their roles in the secondary market as follows:

(a) Banks - these Participants are also ZIPSS Participants; they may trade on their own account but may also operate client accounts on behalf of their customers;

(b) Securities Dealers - these Participants are not ZIPSS Participants and must appoint a settlement agent, however they may trade on their own account and operate client accounts on behalf of their clients;

(c) Non-Dealers - these Participants are not ZIPSS Participants and must appoint a settlement agent; they may only trade on their own behalf and are not permitted to operate client accounts on behalf of their clients.

Secondary Participant: These are Participants who do not have VPN connectivity to the CSD system and may participate directly or indirectly in an auction on their own account or on behalf of their clients. These are generally clients of the Primary Participants.

In summary, Participants on the CSD can have some or all of the following roles: Custodian, Primary Participant, Secondary Participant, Settlement Agent and Issuer.

3.1.1 Settlement Agent

All Participants that are not classified as Bank shall appoint a Settlement Agent. Notification of the appointment of a Settlement Agent shall be made In Writing to BoZ by the Participant using the form presented in Annex 2.

The Participant may change its Settlement Agent by giving notice In Writing to BoZ by using the form prescribed in Annex 3. The change shall be effected by BoZ

(a) at the start of day on the date specified in the notice by the Participant; or

(b) if the change has immediate effect, from the start of the next Business Day.

Changing and adding a Settlement Agent should be in line with the policies and guidelines of the new Settlement Agent.

3.1.2 Bank of Zambia

BoZ may be a Participant with the role of Primary Participant in auctions for securities issued by Government and may also be a Settlement Agent. BoZ will have the class of 'Bank' for secondary market transactions such as open market operations.

3.2 Application for Participation

Each applicant should complete and send to BoZ the Participation Agreement and a CSD Application Form attached as Annex 2 to these Rules and forming an integral part hereof, signed by or on behalf of the relevant applicant. The completion and signing of the Participation Agreement signifies the applicant's acceptance of these Rules.

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

Each applicant shall undergo a certification procedure demonstrating that it has the operational capacity to participate effectively and the effective date of accession shall be dependent on the successful completion of the certification procedure.

The registration of Participants to the CSD shall be done at BoZ. In this regard, BoZ will have the primary register.

3.3 Financial Soundness and Requirements for Participants

For purposes of determining a Primary Participant's financial soundness, recourse shall be made to the Participant's standing with its supervisory or regulatory authority for a regulated Participant. For Secondary Participants, a valid commercial bank account is a requirement.

3.4 Technical Competence

In order to ensure the stable and correct functioning of the CSD, BoZ will make the primary participation of an entity and/or the maintenance of this participation dependent on the successful outcome of tests demonstrating that this entity has the operational and technical competence required (notably with regard to its Information Technology (IT) systems and telecommunications) to be or remain a Primary Participant. The BoZ shall communicate the contents, conditions and dates of any such tests by letter to each Participant concerned.

3.5 Authorised Officers, Authorised Persons and Security Administrators

3.5.1 Authorised Officers

Authorised Officers are persons duly authorised by the Participant to legally bind the Participant. The Participant shall deliver upon execution of the Participation Agreement and from time to time, as appropriate, the names and specimen signatures of Authorised Officers and any other appropriate documentation attesting to the authorisation of each Authorised Officer.

3.5.2   Authorised Persons

Authorised Persons are persons duly authorised to access data and to provide instructions with respect to bank accounts, funds transfers and other financial or securities transactions by electronic means and/or persons designated to access such data and to provide instructions, on behalf of the Participant in connection with the CSD. The rights of Authorised persons may be limited.

The Participant shall also deliver upon execution of the Participation Agreement and from time to time as appropriate the names and specimen signatures of Authorised Persons, accompanied by a certificate signed by the Authorised Officer, or equivalent documentation, attesting to the authorisation of each Authorised Person and the authenticity of the signature.

The access of Authorised Persons to the CSD shall be limited in accordance with prudential separation of functions.

3.5.3   Execution of Participant Instructions

Bank of Zambia shall rely on the information provided by the Participant in executing instructions. Any change in the name or other relevant information about Authorised Officers or Authorised Persons and Security Administrators shall be acted upon within 2 to 3 working days of receiving instructions.

3.5.4   Security Administrators

Security Administrators are authorised persons at BoZ or a Participant that have access to the CSD for the purpose of maintaining User details and profiles of users in the CSD. A Security Administrator shall not have access to transaction entry facilities or management or enquiry functions.

Each Primary Participant shall have, at all times, at least two Authorised Persons recognised by BoZ as Security Administrators. Only BoZ shall have the right, in its sole discretion, to approve the request to create a new Participant Security Administrator and assign a User profile to such Users.

3.5.5   System Administrators

System Administrators are authorised persons at BoZ that have access to the CSD for the purpose of ensuring the system is running efficiently and effectively. A System Administrator shall respond to individual Users and system challenges and facilitate the resolution of these problems.

3.6   Identification of Participants

Each Participant shall have an identification code either in the form of a SWIFT Business Identifier Code (BIC) or any other code as prescribed by BoZ. Examples of the BIC codes of some of the Participants are specified in Annex 4 to these Rules.

3.7   Operational Capacity for Primary Participants

3.7.1   Log in

All Primary Participants should remain logged on to the system throughout the Business day (i.e. between start of day and end of day).

3.7.2   Equipment

BoZ shall not be obliged to supply to Participants any hardware or operating system software to enable utilisation of the CSD.

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

3.7.3   Materials

Any material provided in connection with the CSD is the exclusive and confidential property of BoZ. The Participants agree to keep these materials confidential, to limit access to their employees (under a similar duty of confidentiality) who require access for the proper use of the CSD, and to use all materials in the manner designated therein and in the ordinary course of their business, and not to make any modification to them.

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.

3.7.4   Primary and Fallback Computer Facilities

Each Participant must be connected via a web station configured to exchange messages with the central CSD system. Participants may use the Montran Gateway, accessed via the web station, to enable straight-through processing (STP) of transactions between their custody systems and the CSD.

Each Primary Participant shall also provide for fallback IT equipment for their custody system and access to the CSD. Documents describing the standards and communication protocols (and other functional requirements) for a Participant's computer interface to CSD shall be provided by BoZ to any Participant that has been approved for connection to CSD. Each Participant shall comply with and its computer interface must function in accordance

with such standards and protocols. No computer interface will be implemented unless it has been approved by BoZ.

In order to ensure the stable and correct functioning of the CSD, BoZ may make the participation of a Participant in the CSD, as well as the maintenance of this 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). BoZ shall communicate the contents, conditions and dates of these tests by ordinary letter to each Participant concerned.

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

3.7.5 Location of Computer Facilities

Any primary or fallback connection linked to the CSD may only be located where, as determined by BoZ, there are adequate arrangements for on-site review of a Participant's processing and computer facilities, adequate access to digital telecommunications facilities, adequate arrangements for necessary authentication and security devices, and adequate assurances that operation of the system will not be subject to interruption or interference by internal or external political developments.

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 prior approval of BoZ.

3.7.6 Staffing at Connection and Changes to Connection

The office in which the primary connection is located must be staffed by personnel fully qualified complying with the requirements in Rule 4 Security Procedures; and authorised at all times by the Participant to take appropriate action on behalf of the Participant with respect to the connection upon signing the User Application Form in the Certification Authority (CA) System Rules.

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

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.

3.7.7 Participant Workstation Minimum Configuration Requirements

Participants' CSD web-stations have to comply at all times with the minimum configuration requirements. The details of the minimum configurations can be obtained from BoZ.

3.8 Modifying a Participant's Details

Each Participant shall in case of a merger, split off, name change or in case of any other change in the information required in the Participation Agreement in Annex 2 notify BoZ immediately and provide BoZ with the information required for amending on a form presented in Annex 3 to these Rules.

3.9 Suspension and Termination

3.9.1 Suspension

BoZ may suspend the access of a Participant, that is, "disable" the Participant in the CSD system for a specified or indefinite period of time. A suspension can occur if:

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

(b) requested to do so by the Participant;

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

(d) an event occurs which, in the opinion of BoZ, 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 occurs in respect of the Participant;

(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; and

(g) the Participant is unable to comply with these Rules by virtue of force majeure.

Under a suspension, a Participant will be disabled if it does not possess securities on its own account or on behalf of its clients. However, if it has securities in its possession, all the Participant's Users will be disabled. BoZ 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 the CSD is suspended under this section is not entitled to participate in the CSD and no instructions shall be accepted from the Participant following the implementation of such suspension. The Participant retains the right to access its data outside the system via a request to BoZ. A Participant whose access to CSD is suspended is not excused from discharging its obligations under these Rules, except as expressly provided in or pursuant to these Rules.

BoZ shall immediately notify all Participants (by the most expeditious means available) of any suspension. BoZ may at its discretion reinstate a suspended Participant. BoZ 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. As soon as the suspension has been lifted, BoZ shall ensure that the Participant is treated normally again from the beginning of the next Business Day.

3.9.2   Termination

A Participant ceases to be a Participant on (that is "remove" the Participant in the CSD system)

   (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) BoZ terminating the participation in accordance with these Rules.

A Participant may, by way of notice In Writing to BoZ, resign with effect from a date, which is a minimum of ten (10) business days after the date of the service of the notice. The notice is irrevocable.

Access to CSD may be terminated by BoZ 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;

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

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

BoZ 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 CSD 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.

BoZ 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) any unsettled transactions in the CSD shall be deleted from the CSD and shall be due for settlement directly between the Participants;

(b) the Participant being terminated must immediately pay all sums of money (if any) it owes to any other Participant in respect of obligations arising from the operation of the CSD; and

(c) 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 Participant being terminated.

A Participant whose access is terminated is not entitled to be repaid all or part of any entrance, operating or other fee, which was paid by this Participant. BoZ may at its own discretion charge an exit fee.

4 Security Procedures

4.1 General Security

Participants shall take all necessary action, including segregation of functions and appropriate written internal procedures and levels of authority to ensure the security of data and procedures. `

Should any Participant become aware of any CSD related fraud or attempted fraud, they shall immediately report In Writing to BoZ.

4.2 System Security

Electronic communication between Participants and BoZ is subject to the communication and data security methods set out in these Rules and other applicable laws. The Participants shall comply with the applicable Procedures and the methods designated in these Rules, collectively referred to as the "Procedures", and authorise BoZ to act in compliance with the Procedures to transmit and display data and to act upon each instruction.

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

The security procedures provided by BoZ are designed to verify the source of a communication, as BoZ is required to act on instructions transmitted from a Participant, and not to detect errors in transmission or content including discrepancies between account names and numbers. BoZ may execute an instruction by reference to the account number only, even if the name on the account is also provided. BoZ has no duty to discover, and shall not be liable for errors made by or duplicate instructions issued by a Participant. The Participants agree to be bound by and to settle any electronic instruction executed in its name in accordance with the Rules and Procedures.

The Participants shall develop and maintain adequate internal security procedures and comply with all recommended security procedures in order to prevent unauthorised utilisation of the CSD.

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

5 Creation and Maintenance of Users

5.1 General

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

Each person named in the corresponding E-Token Application Form (contained in Certification Authority (CA) 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, as may be specified by the Participant. As long as BoZ 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, BoZ shall have the right, in its sole discretion, to refuse to execute any instruction, provided BoZ, acting in good faith, doubts the authenticity or authorisation thereof. BoZ shall provide prompt notice, which may be by telephone or e-mail to an Authorised Person of any such rejected instruction.

BoZ shall be entitled to rely on the authorisations and User lists as set forth on the system by the respective authorised System Administrators designated by the Participant through the E-Token Application Form received by BoZ at creation and/or designation of Participant. All such forms shall be dated and signed by an Authorised Person and shall be processed by BoZ within two (2) business days under normal circumstances. Likewise, requests for revocation of admittance to the system of a particular user shall be made using the E-Token Revocation Form. In urgent cases, requests for revocation or modification may be made by Secure Email and will be actioned by BoZ within one (1) Business Day from the time of receipt.

Each Participant will inform BoZ immediately 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 Issue User Access

Each Participant requesting the authorisation of a User shall, at least two (2) Business Days prior to the effective date thereof:

(a) complete and provide BoZ In Writing with the E-Token Application Form, as provided in the CA Policy and Procedures, dated and signed by an Authorised Person requesting BoZ to issue an e-token to the user so enrolled; and

(b) ensure that the previously setup and assigned Participant User Security Administrators (PUSA) have created and authorised the intended user on the ZIPSS/CSD system and have attached the user to their designated profile as determined by the Participant. At system setup, PUSAs shall in line with business

and security needs in their operations setup appropriate role delimited profiles to which all subsequent users in their respective groups shall be attached.

Only BoZ shall have the right, in its sole discretion, to authorise new PUSA and assign them the Participant's Group/Master profile.

BoZ also has the sole right to:

(a) allocate e-tokens to all duly authorised users; and

(b) issue a digital certificate to the User (on the e-token).

Participants through their PUSAs are responsible for the creation and maintenance of their other Users in the CSD system, allocation of User names, User profiles and initial passwords.

Before a User is created on the system and an E-Token Application Form is completed and sent to the Bank for processing to allow the user access, the User must complete the respective CSD User training appropriate to the functions to be performed and if so requested must demonstrate such necessary knowledge of the use of the system.

BoZ will provide one (1) e-token with a Personal Identification Number (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 shall immediately be changed.

5.3 Charging for E-Tokens

BoZ shall provide one e-token with PIN to each user. After the initial allocation, BoZ reserves the right to charge the cost of these tokens to the Participants, for example, for replacement tokens and expansion of the user base.

BoZ may temporarily provide two e-tokens at no cost to a Participant for use in the BoZ Situation Room in Lusaka.

5.4 Creation and Maintenance of User Profiles

Participants shall create and manage their own User Profiles. BoZ shall create PUSAs at initial system setup who shall have privileges to administer User Profiles. The PUSAs shall follow internal business requirements and relevant stipulations of these rules in creating the profiles.

BoZ shall approve specific master templates for each Participant. Within the restrictions of this template, PUSAs can define profiles for their staff, consistent with the segregation of duties principles. In exceptional circumstances BoZ, having set up the master template on the CSD may approve profiles created by a Participant upon request.

5.5 Request to Modify a User

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

5.6 Request to Remove a User

A Participant that requires one or more of its Users to be removed can carry out this task online, but must report In Writing to BoZ that a user has been removed. The report for Users that have been removed shall be submitted on the E-Token Revocation Form (See the CA Rules). User information can be removed from the CSD after 7 years as stipulated in the BoZ Information Security Policy.

In case of emergencies, BoZ Administrators can also disable or remove users from the CSD.

5.7 Right of Bank of Zambia to Rely on Instructions

Each person listed in the relevant E-Token Application Form (See Form in the CA Rules) shall be an Authorised Officer or 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 E-Token Application Form. As long as BoZ acts in compliance with the communication and data security methods as set forth in these Rules or as they 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, BoZ shall have the right, in its sole discretion, to refuse to execute any instruction, provided BoZ, acting in good faith, doubts the authenticity or authorisation thereof. BoZ shall provide prompt notice, which may be by telephone, to an Authorised Officer of any such rejected instruction.

BoZ shall be entitled to rely on the authorisations and User lists as set forth on an E-Token Application Form until receipt by BoZ, at least two (2) to three (3) Business Days prior to the effective date thereof, of a written request of revocation or modification of such E-Token Application Form, dated and signed by an Authorised Officer. An E-Token Application Form may be revised only by a written request signed by an Authorised Officer and each such proposed revision is subject to BoZ's consent in accordance with the procedure laid down in Rules 5.4, 5.5 and 5.6.
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Each Participant will inform BoZ immediately any person authorised to utilise the CSD 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 or otherwise ceases to hold authority for whatever reason including a change in portfolio with the Participant's establishment.

For further details on Security, kindly refer to the CA Rules.

5.8 Retention of User Records

Participants shall maintain User records and all other transactional information in relation to the CSD system in accordance with the provisions of the Electronic Communications and Transactions Act of 2009.

6   Accounts

6.1 General

Participants shall ensure that securities held on their own behalf are held in a separate account (House Account) from securities held on behalf of their clients. Participants may hold client securities in a single Omnibus account; at individual beneficial owner level; or in a combination of both, for example, some clients in an omnibus account and some at an individual level.

6.2 Creating Accounts for Beneficial Owners

A Holder may be an individual person or an organisation. The Holder can be a real person or nominee. BoZ will create the Holders while the Beneficial Owners will be created by Participants. Records for Holders and Beneficial Owners accounts are created in accordance with the procedures set out in the User Manual.

There are no restrictions on who can be holders or beneficial owners. Equally, there are no requirements on banks to get permission to hold securities in the CSD.

6.3 Synthetic Accounts

Synthetic accounts shall be set up automatically by the CSD. They shall not contain any record of holdings of securities. When a new Participant or a new holder is recorded in the CSD, the CSD shall automatically create synthetic accounts in accordance with the roles and classes assigned to that Participant.

The accounts shall be identified by a reference code created in the following way. The first four letters of the Participant BIC code, followed by the letter 'X' followed by the account type number; and if the account is in relation to another Participant (e.g. a primary participant acting on behalf of a secondary participant) or a beneficial owner, the code defining this second party.

The account type numbers shall be as follows:

(a) 0 – Own Account (House Account): this type of account shall be created for all Participants to record the balance of the Participant's own securities.

(b) 1 – Client Account (Beneficial Owner Account): this type of account is created for each Beneficial Owner recorded by a Participant.

(c) 8 – Trading Ceiling Account: this type of account represents the cash limit account of the CSD Participant which is not a ZIPSS Participant, so it will settle the cash leg of all operations using another Participant's ZIPSS account.

(d) 9 – Issuer Account: this type of account records the securities issued into the CSD by an issuer.

The reference of a Client Account created on behalf of an individual Beneficial Owner shall be followed by the reference for that Beneficial Owner.

6.4 Analytic Accounts

An analytic account shall be created immediately securities are acquired by a Participant whether for his own or a client's account. The reference for each analytic account shall be composed of the Synthetic Account Reference; and the ISIN or UID.

6.5 Blocking Accounts

The BoZ Administrator may block a synthetic account if they are requested to do so by the Participant and/or the BoZ believes it is in the best interest of the market to do so. It is important to note that no actions shall be performed on an account which is blocked.

6.6 Restricting Accounts

The BoZ Administrator may restrict a synthetic account if any of the following occurs: it is requested to do so by the Participant; an Insolvency Event has occurred relating to the Participant; and/or the BoZ believes it is in the best interest of the market to do so. Actions on a restricted account may only be performed with the explicit authorization of a BoZ Administrator.

6.7 Account Balances

Within each analytic account the balances are divided into two, that is, Available Balances and Pledged Balances. Available Balances refer to securities that may be used for settlement of transactions; and Pledged balances refer to securities that may be used for collateral purposes and are not available to settle transactions. Within the Available Balance the following information shall be shown:

(a) Opening Balance: the account balance at the start of the day;

(b) Current Balance: this is the opening balance adjusted for all completed debits and credits to date; the number and value of each debit and credit is shown;

(c) Pending Securities: these are pending deliveries, which cannot be settled because of an insufficient balance of securities in the Participant's Available Balance; this quantity is deducted from the current balance when calculating the Available Balance;

(d) Hold Securities: these are securities held in queues awaiting settlement not because of insufficient securities in the account of the seller but because of insufficient funds in the counterparty's ZIPSS settlement account; this quantity is deducted from the Participant's current balance when calculating the Available Balance; and

(e) Projected Balance: this shows the current balance as it would be if all pending and hold transactions were successfully completed.

7 Trading Ceiling

7.1 General

Trading Ceilings are the mechanism by which Settlement Agents control their risk. The cash leg of transactions executed by a Participant who uses a Settlement Agent will not settle if it would result in the Trading Ceiling being breached.

7.2 Setting and Amending a Trading Ceiling

The default level for a Trading Ceiling shall be zero. Settlement Agents may set a Trading Ceiling for each securities dealer and non-dealer for which he acts and may adjust the level of the Trading Ceiling at any time.

7.3 Trading Ceiling Values

For each Trading Ceiling, the CSD shall hold the following values:

   (a) Initial Value: this is the last value set by the Settlement Agent;

   (b) Available Value: the value available for trading at that point in time; and

   (c) Reserved Value: the amount reserved for buying transactions initiated but not yet settled.

7.4 Updating Trading Ceiling Values

The Reserved and Available Values shall be continuously updated during the day for each DvP transaction. When a buying transaction is accepted from the Participant, the Available Balance shall be decreased and the Reserved Value shall be increased by the cash amount of the transaction. When a buying transaction is settled, the Reserved Value shall be decreased by the cash amount of the transaction and when a selling transaction is settled, the Available Value shall be increased by the cash amount of the transaction.

8   Primary Market Transactions

8.1 Types of Transactions

CSD handles primary market transactions involving auctions, private placements and payment events (coupon/interest payments, partial redemptions, optional redemptions, redemptions at maturity). All primary market transactions shall be in the domestic currency, the Zambian Kwacha.

8.2 Auctions

8.2.1 Auctions

 All auctions related to Government securities and OMO will be done in the CSD.

8.2.2 Process Auction Results

Auctions shall be settled through an interface with ZIPSS on a gross basis, using DvP and the auction results shall be processed immediately the auction is finalised.

When an auction is due for settlement; the CSD shall:

(a) debit the issuer's account (which will send the account negative); and credit the issuer's House Account with the total nominal value of the securities;

(b) create individual DvP transaction records showing the issuer's House Account as the seller and the relevant Participant's House Account, or client account or via dealer account (where the Primary Participant is acting on behalf of a Secondary Participant) as the buyer; and

(c) process the individual transaction records in the same way as DvP transactions in the secondary market.

Where the buyer is a Securities Dealer or a Non Dealer, funds must be available within the Trading Limit set by the Settlement Agent before the transaction can be sent to ZIPSS for funds settlement.

Where funds are available in ZIPSS to settle the DvP transaction in full for a Participant Account the securities shall be transferred from the House Account of the issuer to the account of the buyer.

Where funds are not available to settle the DvP transaction in full for a Participant's account within the time limit then CSD shall, at the expiry of the time limit send a cancel request to ZIPSS to cancel the transaction for that Participant and transfer the excluded securities from the House Account of the issuer to the Issuer Account. This effectively reduces the total of the public offering by the value of the excluded securities.

8.2.3 Information Available to Participants

The information available to Participants will relate to the status of pending auctions; confirmation of all successful transfers of securities; and confirmation of any cancelled transactions.

8.3 Private Placements

Private placements may be either Free of Payment (FoP) or DvP. The FoP placements are processed in the same way as FoP secondary market transactions. DvP placements shall be processed in the same way as the outcome of auctions.

8.4 Coupon/Interest

8.4.1 Prior Notification

BoZ shall establish a prior notification date for coupon/interest payments.

On this date and on each subsequent date until Payment Date, CSD shall calculate the amount of interest to be paid on each account, assuming that both the account balance and the rate of interest to be paid remain constant.

This information is intended to be of use to Participants but does not warrant that BoZ shall pay the reported amount of interest.

8.4.2 Reconciliation

One day before the Payment Date of every payment event, the CSD shall place the payment in 'waiting for reconciliation' status and provide information about the event to the issuer.

Prior to the opening of business on the Payment Date, the issuer shall either confirm the amount payable; or amend the amount payable.

8.4.3 Settlement of Coupon/Interest

On Payment Date, the CSD shall compute the amount payable on each account on the basis of the account balance at the end of day on the Record Date and the confirmed payment amount. Where the Payment Day is a non-Business Day, settlement will take place on the next Business Day.

In terms of settlement, the CSD shall generate a cash settlement instruction for ZIPSS, which shall be settled without any funds check where BoZ is the issuer and provided that there are sufficient funds available in the Ministry of Finance (MOF) settlement account where MOF is the issuer.

8.5 Partial Redemptions

BoZ Administrators shall set up the details of Partial Redemptions prior to the Payment Date. On the Payment Date of a partial redemption, the CSD shall reduce the value of each certificate by the amount of the partial redemption. The payment process shall be as described in 8.4.

8.6 Redemption at Maturity

On the morning of Redemption Date, the CSD shall send a DvP message to ZIPSS, which will be settled where BoZ is the issuer, without any funds check and in the case of MOF as the issuer, provided MOF has sufficient funds in its ZIPSS Settlement Account.

Once confirmation of payment has been received from ZIPSS, the securities are moved from the Participant's Accounts to the account of the issuer. In the event that there are insufficient funds in the MOF Settlement Account in ZIPSS, the redemption transaction will be queued until settlement takes place; and the issue will be placed in 'Suspended' status to prevent any other activity in that security.

9 Submission and Validation of Messages

Messages sent by Participants to the CSD shall immediately be validated. Every message is validated for the presence of mandatory fields in accordance with the SWIFT message standards in respect of field formats (syntax), field contents and the relationship between fields (context) are validated.

If a message is rejected, a Notification (SWIFT message) is sent to the Participant that sent the message. The accepted messages are recorded and chronologically processed by the system according to the FIFO ("First In First Out") principle.

10 Secondary Market Transactions

10.1 Classes of Transactions

The CSD shall process the following types of transactions:

(a) Sales and purchases of securities (including term deposits) on the basis of DvP;

(b) Repo and reverse repo agreements on the basis of DvP; and

(c) Transfer of securities which do not require a transfer of funds, that is, FoP transactions.

All transfers between Participants take place on the basis of an instruction that has been entered by both Participants and matched by the CSD.

10.2 Finality of Settlement

Settlement shall be final and unconditional at the moment the current balance in the accounts of the buyers and sellers have been credited or debited with securities. There is no perceptible delay between the debit to the seller and the credit to the buyer in the CSD.

10.3 Short Selling

Participants shall not sell securities either on their own behalf or on behalf of their clients that are not owned by the seller in their CSD account.

10.4 Responsibility for Reporting and Settlement

Where Participants have traded directly with each other (over the counter) it is recommended that these transactions are reported directly to CSD within one (1) hour of concluding the trade or before the CSD cut off time for DvP settlement, whichever is earlier.

It is the responsibility of the Participant acting on behalf of seller (whether it is principal or a client trade) to ensure that securities are available to settle the transaction immediately it is reported to the CSD and at the latest by the cut off time for DvP settlement on that Business Day.

It is the responsibility of the Participant acting on behalf of the buyer (whether it is a principal or a client trade) to ensure that funds are available to settle the transaction immediately it is reported to the CSD and at the latest by the cut off time for DvP settlement on that Business Day.

BoZ may impose penalties, if a Participant fails to report trades within this timescale.

10.5 Restricted Accounts

All transactions entered in respect of a Restricted Account shall be queued 'Waiting for Authorisation' and shall not be passed for settlement until such approval has been received.

10.6 Settlement Day

Transactions may be entered by Participants for settlement on the current Business Day. The Trading Day may be a date prior to the settlement date.

Transactions may be generated by the CSD for settlement on a future date for example, the second leg of a long term repo. If a future transaction is due for settlement on a non-Business Day, it shall be settled on the next Business Day.

10.7 Cancellation of Messages and Transactions

Transactions that have been settled are final and cannot be cancelled. If a transaction has been settled in error an equal and opposite transaction shall be matched and settled by the Participants. Participants may cancel messages that require matching provided they have not been matched.

Messages which have been matched cannot be cancelled by Participants. Participants who wish to cancel unsettled transactions may contact BoZ outside of the system to request for such a cancellation. BoZ may grant or refuse such a request at its absolute discretion.

BoZ will consider the request and action agreed cancellations as quickly as possible. However, it is possible that the transaction may settle even though BoZ has agreed the cancellation, if both securities and funds are available. BoZ shall not be responsible for any loss or damage suffered by the Participant as a result of the transaction being settled prior to the cancellation being effective.

10.8 Messages and Formats

Participants shall initiate transactions in the CSD by submitting securities transaction messages either from the workstation module or by sending SWIFT format messages through the Montran Gateway (STP).

All confirmation messages shall be sent in SWIFT format to the workstation. Participants may request that, in addition, all messages are sent to the Montran Gateway.

10.8.1 Settlement Instructions

The following SWIFT messages shall be entered by Participants to instruct the CSD to transfer securities:

(a) MT540 – Receive Free Instruction;

(b) MT541 – Receive Against Payment Instruction;

(c) MT542 – Deliver Free Instruction;

(d) MT543 – Deliver Against Payment Instruction.

10.8.2 Confirmations and Notifications

The following messages shall be sent by the CSD to Participants to confirm the execution of instructions or as notifications to warn of failures and unusual conditions:

(a) MT544 – Receive Free Confirmation

(b) MT545 – Receive Against Payment Confirmation

(c) MT546 – Delivery Free Confirmation

(d) MT547 – Delivery Against Payment Confirmation

(e) MT548 – FoP/DvP Notification

(f) MT599 – Free Format Message

10.8.3 Validation and Matching

The CSD shall validate all messages and reject any messages which fail the validation checks. A notification of the rejection shall be sent to the Participant which submitted the message (SWIFT MT548).

All messages that pass validation and require matching shall be checked against any queued messages. If the details on the new message match those on a queued message a transaction (matched messages) shall be passed for settlement. If the new message does not match against a queued message, the new message shall be queued 'Waiting for Matching'.

Each queued message shall be available for matching against new messages. Queued messages shall be cancelled automatically by the system at cut off time for the relevant facility and a notification (SWIFT MT548) sent to the sender of the message.

10.9 DvP Sale and Purchase Transactions

10.9.1 DvP Processing

The CSD achieves settlement on the basis of DvP through a link with ZIPSS.

The settlement of DvP transactions involves the following stages:

(a) reservation of securities within the CSD account of the seller (deliverer):

(b) the sending of a message to ZIPSS to request the irrevocable transfer of funds; and

(c) the update of the securities accounts of the buyer and seller when confirmation of funds transfer has been received.

10.9.2 Matching

All DvP transactions require matching. Where Participants have dealt directly with each other outside of any trading systems, Participants shall send messages related to sales and purchases, that is MT543 (DvP Sale Transaction) and MT541 (DvP Purchase Transaction) respectively:

The matching criteria used by CSD shall include:

(a) Message type: 543

(b) Operation type: DvP

(c) Reference: This is a message reference and should be a maximum 16 characters

(d) Trade date: Transaction date

(e) Settlement date: The date the transaction settles

(f) Receiving/delivering agent: The buyer/seller

(g) Issue identifier: ISIN or UID

(h) Face Value Amount: The face value of the instrument

(i) Cash currency: the transaction currency

(j) Delivery account type: own, domestic or foreign

(k) Cash amount: the value of the transaction

10.9.3 Processing

Transactions matched within DvP shall be processed as follows:

(a) Check the CSD account of seller for sufficient securities to satisfy the transaction in full:
  - if securities are available; debit 'Available Balance' and place securities in 'Hold' status;
  - if securities are not available then queue the transaction 'Waiting for Securities'; securities in this queue shall be processed each time securities are credited to the account.

(b) Immediately securities are available, the CSD shall check if the Participant is a ZIPSS Participant:
  - if the Participant is not a ZIPSS Participant, the CSD shall check if funds are available within the Trading Ceiling set by the Settlement Agent:
  - if funds are available, the CSD shall debit 'Available Balance' and credit 'Reserved Balance'; and

- o if funds are not available the transaction shall be queued – 'Waiting Supplementary Funds'.

(c) Immediately funds are available within the Trading Ceiling or if the Participant is also a ZIPSS Participant; the CSD shall send a message to ZIPSS to instruct it to move funds;

- o if funds are available in ZIPSS (in the Settlement Account of the Participant or the Settlement Accounts of the Participant's Settlement Agent), the CSD will receive a message from ZIPSS confirming that funds have been moved; and

- o if funds are not available in ZIPSS the transaction shall be queued 'Waiting for Funds Confirmation'.

(d) Once confirmation is received from ZIPSS, the CSD shall:

- o credit the buyer's 'Available Balance' with the securities that were blocked (Hold status) in the seller's securities account; and

- o remove the securities from 'Hold' status in the sellers account.

10.9.4 Unsettled Messages and Transactions

Messages and transactions are automatically cancelled by the CSD as follows:

(a) If a message is not matched by the cut off time for DvP settlements, the message is cancelled and a notification sent to the sender of the message (SWIFT MT548);

(b) If a matched transaction is not settled by cut off time for DvP settlements, the transaction is cancelled and a notification sent to the buyer and the seller (SWIFT MT548);

It is the responsibility of the Participants to re-create the messages and transactions on the following Business Day to settle their liabilities to each other.

10.9.5 Information to Participants

All queued transactions shall be visible to Participants through the workstation. It is the responsibility of Participants to monitor the status of their transactions and to take appropriate action to ensure the settlement of such transactions.

10.10 Repo and Reverse Repo Transactions

10.10.1 General

A Repo is a sale and repurchase agreement between two Participants. It is made up of two DvP operations linked together. These operations involve two transactions, that is, the first leg referred to as the sale operation and the second leg, the repurchase operation. A Reverse

Repo is the same transactions as a repo but viewed from the perspective of the buyer of the securities rather than the seller.

10.10.2 Types of Repo

Repo operations may be Intra-day where the second leg due for settlement on the same day as the first leg or long term where the second leg is due for settlement on a future date. Both Intra-day Repos and long term Repos may be between Participants or between a Primary Participant and BoZ.

10.10.3 Restrictions on Repos

Long term Repos are not permitted where the redemption date of the security is between the settlement date of the first leg and the settlement date of the second leg.

10.10.4 Matching Repos

Participants (including BoZ) shall report Repos to the CSD. The seller and buyer will use the SWIFT MT543 and SWIFT MT541, respectively. The matching process for repos shall be the same as that for DvP transactions except that additional fields relating to contract number and contract expiration date and time (where appropriate) shall match.

10.10.5 Processing First Leg

The processing for the first leg of the Repo transaction shall be exactly the same as the processing for a DvP transaction.

10.10.6 Processing Second Leg

For Intra Day Repos, once the first leg of a Repo is settled, the second leg is created and is queued 'Waiting for Deferred Start'. For long term repos the second leg is queued "Future". Settlement of the second leg, shall be automatically initiated at the date and time entered on the initial message (contract expiration date). Settlement of the second leg shall be exactly the same as the processing for a DvP transaction.

If the second leg is not settled by the cut off time for DvP transactions, the second leg transaction is cancelled. The counterparties shall agree outside of the system the methodology for settling the transaction.

10.10.7 Free of Payment Repo

Participants may enter into a FoP using the following records: SWIFT MT540–Receive Free Instruction and SWIFT MT542–Deliver Free Instruction. The FoP repo shall be matched and shall result in the FoP transfer of securities between the two Participants.

10.10.8 Interest/Coupon Payments

Any interest/coupon payment with a Record Date between the first and the second leg of a Repo shall be paid to the holder of the securities.

This holder of the securities has to return the interest to the original owner.

10.11 Free of Payment Transfers

10.11.1 Movements within a Participant

To effect an FoP, transfer to or from a client or between two clients of the Participant, the Participant shall enter a single message (SWIFT MT542). The message shall be validated by the CSD. Accepted messages shall be passed for settlement. However, those messages which fail validation shall be rejected and a notification (SWIFT MT548) sent to the Participant.

10.11.2 Movements across Participants

To effect an FoP transfer across Participants, the deliverer of securities will use SWIFT MT542 and the recipient will use SWIFT MT540. Messages shall be matched in the same way as for DvP messages except that no value shall be entered or matched.

10.11.3 Processing

The CSD shall transfer securities from the delivering account to the receiving account if sufficient securities are available in the deliverer's account. If insufficient securities are available to settle the transaction in full, the transaction shall be queued 'Waiting for Securities'. The transaction shall be cancelled if it is unsettled at FoP cut off time.

10.12 Rediscount Facility

The CSD system will accommodate the Rediscount Facility. The CSD will validate that the securities are eligible for rediscounting (configurable as system parameter). The operation is created using a single SWIFT MT543 entered by the Primary Participant requesting the rediscount. The cash value of the transaction is calculated using the formulas specified in Annex 5.

Once the above-mentioned message is received and accepted, the system will automatically create the rediscount operation that is automatically placed in an approval status, pending authorisation from BoZ. Once the approval step is successfully performed, the rediscount operation is processed so that it transfers the securities from the account of the Participant to the own account of the BoZ. This rediscounted security is held in the BoZ account until maturity or can be traded in the secondary market. The agreed cash amount will be transferred from BoZ to the Participant's settlement account.

For secondary participants, rediscounts of securities shall be done through the Settlement Agents.

11 Pledges in favour of Bank of Zambia

11.1 Types of Pledge

Pledges from Participant to BoZ may take one of the following forms:

(a) Secured Loans used under Open Market Operations.

(b) Loans of Last Resort (LOLR) explicitly granted by the BoZ in emergencies, which may be collateralised with other assets as well as pledged securities.

(c) Zambia Electronic Clearing House Limited (ZECHL) pledge: One of the requirements under the ZECHL Rules is that all members of the ZECHL should hold sufficient eligible securities, in trust, with BoZ, as collateral. All clearing house Participants are therefore required to operate with adequate collateral as provided in the Rules and Procedures of ZECHL.

11.2 Secured Loan

A Secured Loan is a collateralised loan which is given to a commercial bank by the BoZ. Secured loans will be issued through auctions as part of BoZ's OMOs. Both Government securities and OMO deposits will be considered as collateral for a Secured Loan.

The Secured Loan will be treated as a pledge transaction in favour of BoZ. In this case, the CSD shall move securities and/or OMO deposits in the House Account of the Participant from the Available Balance to the Pledged Balance. The collateral value of securities which are pledged to BoZ will be calculated as specified in Annex 8.

11.3 Loan of Last Resort

Loans of Last Resort are agreed between Participants and BoZ outside of the system.

To report a Loan of Last Resort, a Participant sends a Pledge Instruction (SWIFT MT 527) containing the following information: loan value, maturity date, contract number, counterparty (which shall be BoZ), ISIN and quantity of each security to be pledged. To complete this transaction, BoZ shall enter the corresponding details of the transaction into the CSD system.

The CSD shall validate these messages. The valid messages shall be placed in a 'Waiting for Matching' queue. Messages which fail validation shall be rejected and a notification (SWIFT MT 558) sent to the Participant which entered the message. Messages which do not match shall be queued 'Waiting for Matching'. The CSD shall pass matched transactions for processing. For matched transactions, the CSD shall transfer the nominated quantity of each security from the Participant's Available Balance to the Pledged Balance. The value of the pledged securities will be agreed outside the CSD.

The cash leg will be provided by BoZ directly to the Participant's settlement account in the ZIPSS. On the maturity date of the loan, BoZ shall await receipt of a repayment confirmation message before releasing the pledged securities (collateral).

11.4 Zambia Electronic Clearing House Limited Pledges

ZECHL rules impose certain powers, responsibilities and obligations on BoZ as Overseer, Regulator and Participant in the Payment and Clearing Systems;

One of the requirements under the ZECHL rules is that all members of the ZECHL should hold sufficient eligible securities, in trust, with BoZ, as collateral. Only cash and Treasury bills with a maximum tenure of 364 days are eligible for ZECHL collateral All clearing house participants are therefore required to operate with adequate collateral as provided in the rules and procedures of ZECHL;

Collateral is reviewed by the Bank of Zambia on the first working day of every month and communicated in writing to the participants. Participants are expected to put in place the revised amounts on the 7th working day of every month.

In compliance with the ZECHL collateral requirements the following procedures and rules shall apply for maintaining and managing collateral on the CSD;

(a) Each commercial bank shall pledge sufficient securities with BoZ on the CSD to meet the ZECHL collateral requirement.
(b) Only eligible Government securities days shall be pledged as ZECHL collateral.
(c) Pledges entered by participants shall be validated by the system and pledges with errors shall be rejected. The participant shall ensure that pledges entered settle successfully.
(d) The CSD system shall value eligible securities at their current market values at the time of pledging as ZECHL collateral.
(e) Treasury bills pledged as collateral that mature before expiry of a pledge contract shall be transferred to the participant's ZECHL cash collateral account on BoZ banking system. Funds on the cash collateral account shall be transferred to Participants' settlement accounts by BoZ upon receipt of instructions In Writing and confirmation that replacement securities have been provided by the participant on the CSD system.
(f) boZ shall determine and communicate the required collateral amount indicating specific start and end dates for the collateral period. Upon expiry of the pledge contract, securities shall be automatically released back to the Participant.
(g) Prior to expiry of pledge contract, the system shall allow Participants to diarise new pledge contracts that shall start at diarised date to enable participants remain compliant with ZECHL rules and the National Payment Systems Act.
(h) Where a Participant decides to recall pledged securities prior to expiry of pledge contract, such a Participant shall request Banking Division in writing to release the pledged securities after providing replacement securities on the CSD system.
(i) The CSD system shall generate a notification to Participants and BoZ two (2) days before expiry of existing contract.

The securities that are pledged for ZECHL collateral shall be held separate from other securities and blocked from trading.

A Participant that operates with inadequate collateral shall be liable to a penalty in accordance with Sections 18 and 19 of the National Payment Systems Act of 2007. The penalty shall be calculated for every day that the participant operates with insufficient collateral. In addition, BoZ may suspend any participant that operates with inadequate collateral for such period and on such terms as may be determined by BoZ. The collateral value of securities which are pledged will be calculated as specified in Annex 9.

11.5 Messages and Notifications

The following messages shall be sent by CSD to Participants to confirm the execution of instructions or to warn of failures and unusual conditions under LOLR and ZECHL pledges:

(a) Pledge Instruction – SWIFT MT527

(b) Pledge Notification – SWIFT MT558

(c) Free Format Message – SWIFT MT599

Participants shall submit to the CSD a Pledge Instruction (SWIFT MT 527) specifying the pledge maturity date.

For valid messages securities are transferred from the Available Balance to the Pledged Balance in the House Account of the Participant. The Pledge Scope Code is used to keep these securities separate from any other type of pledged securities.

11.6 Pledge End Date

Before the Pledge end date, BoZ should release the securities by submitting a SWIFT MT527 message. If the BoZ does not release the securities on time at the end of the Pledge Date, the CSD shall automatically move the securities from the Pledged Balance to the Banned Balance. However, in the case of a Secured Loan and ZECHL, the Pledge release shall be executed automatically by the system at the beginning of day on the specified Pledge end date.

11.7 Interest

Interest payable during the life of the pledge shall be paid to the Pledger.

11.8 Partial Redemptions

The value of the pledge shall be automatically reduced in the event of a partial redemption of the security.

11.9 Parameters

Securities may be pledged by Participants in favour of BoZ provided:

(a) the security (ISIN) has a flag 'Eligible for operation with BoZ'; this determines if a security can be used as collateral within ZIPSS;

(b) the Participant record in CSD has a flag permitting it to perform Pledge or repo operations with BoZ.

11.10 Execution of Pledges

BoZ may, at its own discretion, execute the Pledge by sale or by appropriation, if:

(a) the loan is not repaid and BoZ, at its discretion, is unwilling to provide any further financing for that Participant;

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

(c) the Participant is declared bankrupt;

(d) the Participant's Settlement Account in ZIPSS has been terminated or the acts and omissions on the part of the Participant, in BoZ opinion, result in systemic risk or may endanger the smooth operation of ZIPSS or ZECHL; and

(e) the Participant does not comply or no longer complies with the conditions as referred to in Rule 3.

12   Pledges not involving Bank of Zambia

12.1 Types of Pledge

The following types of pledges may be recorded in the CSD:

   (a) between a Participant and its client;

   (b) between the client of one Participant and another Participant;

   (c) between two clients (of the same or different Participants); or

   (d) between two Participants.

12.2 Messages and Notifications

The following messages shall be sent by CSD to Participants to confirm the execution of instructions or to warn of failures and unusual conditions:

   (a) Pledge Instruction – SWIFT MT 527

   (b)Pledge Notification – SWIFT MT 558

   (c) Free Format Message – SWIFT MT 599

12.3 Pledges involving a single Participant

Pledges made between a Participant and his client or between two clients of the same Participant shall be reported to the CSD using a single Pledge Instruction (SWIFT MT 527). The CSD shall validate the message. Messages which fail validation shall be rejected and a notification (SWIFT MT558) sent to the Participant which entered the message. Messages which pass validation are processed within the CSD.

12.4 Pledges involving two Participants

Pledges made between two Participants, between clients of different Participants or between the client of one Participant and another Participant shall be reported to the CSD by both Participants using SWIFT MT 527.

The CSD shall validate these messages. Messages which fail validation shall be rejected and a notification (SWIFT MT 558) sent to the Participant which entered the message.

Valid messages shall be compared with messages which are in the WFM – 'Waiting for Matching' queue in accordance with the following criteria:
   (a) message type;

   (b) pledger;

   (c) pledgee;

(d) instruments (there may be one or more instruments included in a single pledge instruction);

(e) number of certificates (a number shall be entered for each instrument);

(f) pledge end date;

(g) contract number; and

(h) contract value (this value shall be reported to Participants but shall not be processed by the CSD).

The CSD shall pass matched transactions for processing. Messages which do not match shall be queued 'Waiting for Matching'.

12.5 Processing

Provided sufficient securities are available, the CSD shall update the account of the pledger as follows: debit the Available Balance and credit the Pledged Balance.

If insufficient securities are available, the Pledge Instruction shall be queued 'Waiting for Securities'. The queued Pledge Instruction shall be re-tried each time securities are added to the account. Queued instructions shall be cancelled at cut-off time for FoP settlement.

12.6 Pledge Cancellation

The Pledgee and Pledger may, at any time, release the securities (cancel) the Pledge. To cancel the Pledge, the Participants shall both submit matchable Pledge messages (SWIFT MT 527). These messages are processed in the same way as initial Pledge messages.

12.7 Pledge End Date

Before the Pledge end date, the Pledgee should release the securities by submitting a SWIFT MT 527 message. In this instance, the CSD shall automatically move securities from the Pledged Balance to the Available Balance. However, if the Pledgee does not release the securities on time at the end of the Pledge Date, the CSD shall automatically move the securities from the Pledged Balance to the Banned Balance.

12.8 Pledge Execution

Pledgees shall only execute a pledge on the instructions of a court or body with similar authority.

To execute a Pledge, the Pledgee shall execute the pledge by appropriation – SWIFT MT 540, the CSD shall validate the message. Messages with errors are rejected and a notification (SWIFT MT 558) shall be sent to the Participant that sent the message.

Valid instructions are processed by appropriation. The securities shall be transferred FoP from the Pledged Balance in the account of the Pledger to the account nominated by the Pledgee on the appropriation instruction.

12.9 Interest

Interest payable during the life of the pledge shall be paid to the Pledger.

12.10 Partial Redemptions

The value of the pledge shall be automatically reduced in the event of a partial redemption of the security.

12.11 Redemptions

It shall be the responsibility of the Pledger and the Pledgee to ensure that the end date of the pledge is prior to the redemption date of the security. Should the securities be redeemed, for any reason, during the life of the Pledge, the redemptions monies shall be paid, by the CSD, to the Pledger. The CSD shall issue a report on the maturity date of an issue, showing any outstanding pledges as of that date.

13 Repos in favour of Bank of Zambia

13.1 Intra-day Liquidity Facility

13.1.1 Repo Registration Request

Some Primary Participants are eligible to repo securities to BoZ in order to obtain funds from the Intra-day Liquidity Facility (ILF) at any time during the Business Day. However, if the loan is not repaid within the Business Day it will be converted either into an overnight repo or a permanent trade where it will be considered as a rediscount (See Rule 10.12) depending on the prevailing policy.

If the prevailing policy dictates that the unrepaid ILF be converted to an automatic OLF loan attracting interest, BoZ will continue to hold the securities until the loan is repaid at the prescribed time and the following will take place:

(a) The creation of the new second leg operation that is clearly identified as an overnight loan, where the repurchase cash amount will be the original one plus the overnight interest calculated using the formula provided in Annex 6;

(b) This will allow for the CSD to close for the current Business Day;

(c) The CSD will attempt the settlement of the overnight loan at the beginning of the next business date;

(d) If the overnight loan is not settled by the end of the processing Business Day, the system will automatically extend the loan for an additional night, calculating an additional overnight charge that is also debited as a separate transaction. The number of overnight loan extensions to be automatically performed by the system is controlled by the system parameter identified as 'Number of Overnight Extension Days'.

If the BoZ prevailing policy does not allow for the creation of an automatic overnight loan, the securities repoed to obtain the intra-day credit will be rediscounted at the ZIPPS final cut off time. The rediscount securities shall be sufficient to cover the unpaid ILF. Notwithstanding the above, BoZ reserves the right to make changes to the rules relating unpaid ILF as and when deemed necessary. Any such change will be communicated to the eligible Primary Participants.

13.2 Overnight Repo

To activate an overnight loan, a Participant shall enter a repo instruction SWIFT MT 543 in the CSD as an overnight loan and a maturity date of the next Business Day. If the message is valid, the CSD shall generate a Repo Transaction that shall be placed in a 'Waiting for Authorization' queue.

When BoZ has authorised the transaction, the CSD shall transfer the nominated quantity of each security from the Seller's Account to the Buyer's Account (BoZ) and the value of the securities in accordance with Annex 6.

The CSD shall send a message to ZIPSS giving the Repo Contract Number and the value of the repoed securities. The cash leg will be settled in ZIPSS in line with DvP principles.

The following day the CSD shall await receipt of a repayment confirmation message from ZIPSS before releasing the securities (collateral). If the cut off time for DvP is reached prior to receipt of a repayment confirmation message, the CSD shall send a cancellation message to ZIPSS but shall not release the securities.

14 Queue Management

The CSD shall place messages and transactions in queues when they cannot be immediately settled, as follows:

(a) Waiting for Matching: this contains messages, which require matching, but which are not yet matched;

(b) Waiting for Securities: this contains sold transactions where there is insufficient Available Balance in the CSD account of the Participant;

(c) Waiting for Supplementary Funds: this contains transactions undertaken by Participants who do not have their own ZIPSS Settlement Account and who have insufficient funds from their Settlement Agent.

(d) Waiting for Funds: this contains transactions where a confirmation of ZIPSS settlement is awaited; transactions will normally only appear in this pending status if there are insufficient funds available in the ZIPSS account to settle the transaction;

(e) Waiting for Future Settlement: this contains transactions which are due for settlement at a subsequent hour or day (e.g. the second leg of repos);

(f) Waiting for Authorisation: this contains transactions on Restricted Accounts, which are awaiting BoZ authorisation.

Information concerning transactions in the queues is available to Participants through the web-station. Participants shall review these queues on a regular basis and ensure that any necessary steps are taken to facilitate the settlement of the transactions. In particular, Participants shall review the queues prior to the cut off time for a particular facility.

15 Reports and Enquiry Facilities

15.1 Access

All information in the system shall be available at all times to persons in BoZ who are authorised to view such information. All Participants shall have the ability to authorise their Users to view some or all of their own data, which includes data relating to their clients. Settlement Agents may also view information to their customers' usage of the Trading Ceiling.

15.2 Enquiries

Participants shall be able to view the following:

(a) Standing data: this includes list of Participants, Securities, and Payment Events;

(b) Calendar and daily operating cycle (cut-off times): This relates to a list of working and non-working days and the normal timetable within each day;

(c) System status: This relates to what stage in the daily cycle the system has reached.

The CSD shall provide the Participant with systematic information on:

(a) the balances and settled transactions which affect their securities accounts and the accounts of their clients;

(b) eligible securities and payment events;

(c) pending and settled transactions;

(d) rejected and cancelled transactions;

(e) queued transactions; and

(f) pledge and repo movements and potential movements.

Participants may make enquiries at any time during the Business Day. The reports may be viewed on the web-station or may be printed or downloaded in either PDF or CSV format.

15.3 Account Activity Report

At the end of each Business Day, the CSD shall provide an Account Activity Report for each Participant.

15.4 Digital Signature

All reports provided by the CSD shall display a digital signature as a guarantee of authenticity.

16   Operating Days and Hours

16.1 Operating Days

The CSD shall operate each weekday (Monday to Friday) except for public holidays according to the calendar maintained by BoZ. Any deviations from this planned schedule shall be announced in advance to Participants In Writing.

16.2 Daily Operating Cycle

The CSD shall process in accordance with a daily operating cycle as specified in Annex 10. The cycle shall include the following periods for action:

(a) Prior to Start of Day: during this period, BoZ shall manage Standing Data reports and charts available to Participants;

(b) Start of Day: Housekeeping functions may be undertaken by Primary Participants.

(c) Start of Business Day: the settlement of pending auctions and Payment Events will be initiated; any queued value dated transactions with the current Business Day will be entered automatically for processing; Participants may enter transactions;

(d) Intra-day auction cut off: no further intra-day auctions will be processed after this time;

(e) DvP Cut Off: no further DvP transactions may be entered by Primary Participants;

(f) FoP Cut Off: no further FoP transactions may be entered by Primary Participants:

(g) End of Business Day: end of day Reports are generated and are available for downloading by Participants.

When there is an extension in the ZIPSS Operating hours, an alert should be sent from the ZIPSS Administrator to the CSD Administrator. Similarly, when there is an extension in the CSD Operating hours, an alert should be sent from the CSD Administrator to the ZIPSS Administrator.

16.3 Operating Hours

The CSD operating hours are defined in Annex 10 to these Rules and may be modified from time to time.

17 Error Handling

17.1 General Obligations

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

BoZ shall inform the Primary Participants in case of a technical failure of the system compromising the Settlement of CSD transactions for more than 30 minutes during the day and for more than 30 minutes after End of Day.

If a technical or other failure at a Participant occurs, the Participant may instruct BoZ to suspend its account and the accounts of its clients and Participants for whom it acts as Settlement Agent. Account suspension requires confirmation In Writing from the Participants and the lifting of such a suspension requires confirmation In Writing from the Participant and BoZ.

The information can be exchanged via free formatted SWIFT MT 999-type messages, secure emails, faxes, or phone calls. Authenticated faxes may be requested for confirmation.

17.2 Telecommunication Failure

In case the connection of a Participant's CSD web-station to the VPN breaks down, the Participant should within a reasonable period of time start a new connection via their fallback line. If the Participant is then still unable to send messages to the system, it should contact BoZ to determine what action needs to be taken. Any agreed action shall be confirmed In Writing by the Participant and BoZ.

17.3 Failure of the VPN

An inability to access the central system via the VPN for all or a significant number of Primary Participants effectively prevents the effective operation of the CSD. Such a situation will only be deemed to have occurred, if BoZ advises all Participants that such an event has occurred. Primary Participants will be required to utilise the fallback facilities (Disaster Recovery Sites) to ensure operational continuity.

However, a Situation Room will be located within BoZ, Lusaka to act as an emergency room for specific Primary Participants who are unable to access the central system via the VPN. This will act as a fallback site for these Participants to enter transactions directly into the CSD via the Montran Gateway and the BoZ LAN. This will require the use of e-tokens to control access in a secure fashion, which may be provided to Participants by BoZ. A Participant who wishes to access the Situation Room shall complete the Situation Room Authorisation Form in Annex 11.

18   Audit Rules

18.1 General Audit Rules

Each Primary Participant shall assess compliance with the functional, technical and organisational features, including security provisions, as specified for the CSD in these Rules. BoZ may require on a regular basis the submission of audit reports and working documents. BoZ shall also assess compliance with the above-mentioned features. BoZ has the right to examine Participants' controls for adequacy and to make the necessary contacts with the auditors of the Participants.

BoZ shall subject its own operations to both internal and external audits.

18.2 Annual Audit

Each Primary Participant must submit to BoZ a yearly compliance audit assessment as presented in the Annual Audit Form in Annex 12, within 60 calendar days from the date of the Participant joining the CSD. The yearly compliance audit form must be duly signed by an Authorised Officer of the Participant. Any evidence of that authorisation which is reasonably requested by BoZ must be promptly produced to BoZ following that request. Only Primary Participants who have VPN connectivity will be subjected to The Annual Audits.

19 Archiving and Publication of Data

19.1 CSD Audit Trails

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

BoZ auditors have the right to examine all the activities carried out on the system, including transaction and static data amendments, but access to audit trail data will be restricted by use of User profiles. Where auditors or any other legal entity wishes to access data about another Participant, BoZ will require a certified copy of a board resolution of that Participant (or the equivalent corporate authority) authorising the auditors or this other legal entity to access data about that Participant from BoZ. 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, include the following:

(a) Facility to list all transactions for the CSD from online history files within the system for at least three years, from postings on the database;

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

19.2 Publication of Statistics

BoZ shall have the right to publish, periodically in its own bulletin, any statistical information relating to the operation of the CSD, provided such information does not compromise the privacy of individual Participant data.

19.3 Conservation and Archiving of Documents

BoZ and the Participants shall comply with the laws and regulations applicable in Zambia concerning the conservation and archiving of documents as regards the support and the duration of the conservation. For this purpose, transactions and accounting data will be stored for a period in accordance with relevant Zambian legislation (which specifies seven years). All current transactions and data up to three years are accessible on-line in real-time.

20   Security and Confidentiality Provisions

20.1 Data integrity and confidentiality (at Participants' level)

Participants must comply with the applicable Procedures and must ensure that the transaction flows in their internal systems are adequately shielded against any internal or external threat. Confidentiality and data integrity must be safeguarded. Primary Participants must refrain from accessing the central system except through the Montran Gateway or the associated web browser facilities.

20.2 Transfer of Information

Participants are deemed to authorise the transfer of any information relating to the Participant to and between the branches, affiliates and agents of BoZ and third parties selected by any of them, wherever situated, for confidential use in connection with the provision of CSD facilities to the Participants (including for data processing purposes) and further acknowledge that any such branch, affiliate, agent and 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 to act, as it shall determine.

20.3 Availability (at Participants' level)

Participants should set up fallback equipment for the IT components required for the connection to the VPN. They should also have sufficient data backup as regards the data exchanged through the system.

20.4 Help Desk

BoZ shall provide a first level help desk to support the operation of the central system and the Participant web-station in normal circumstances. BoZ shall furthermore centralise and monitor all information and support requests and problem reports addressed to the providers. For more information on the help desk see Annex 13.

20.5 Contingency Event

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

Under these conditions, BoZ shall have the right, in its sole discretion, to conduct special reconciliations with Participants and to request therefore the necessary transaction and other information from Participants. As a result of reconciliations in a Contingency Event, Participants may be required to perform special transactions to ensure that all systems are properly synchronised. When a Contingency Event occurs, Primary Participant will be required to fill in a Contingency Event Log Form presented in Annex 14.

21   Liabilities

21.1 Force Majeure

If by force majeure any Participant is rendered unable wholly or in part to carry out its obligations under these Rules (except payment obligations) or is delayed in its operations to be performed pursuant to these Rules (except payment obligations) such Participant may within fourteen (14) days from the date of commencement of such force majeure give written notice thereof to BoZ stating the date and extent and the nature of the force majeure causing the same. Upon giving of such notice, the obligations of the Participant claiming force majeure may be suspended during the continuance of such force majeure so far as such obligations are affected by the force majeure.

The Participant claiming force majeure shall use all due diligence to remove the effects thereof but nothing in this clause requires any Participant to settle any industrial dispute except in such manner as it in its absolute discretion deems fit.

Any Participant the performance of whose obligations has been so suspended shall resume performance thereof as soon as reasonably possible after the circumstances preventing such performance have terminated and shall promptly thereafter so notify BoZ In Writing.

In the event that a Participant has invoked the provisions of this clause and a force majeure continues for a period in excess of one (1) month the BoZ may terminate the Participant's participation.

A Participant shall notify BoZ immediately upon its becoming aware of any event known or likely to give rise to a possible suspension of its obligations pursuant to Rule 3.9.

For the purpose of these Rules the term "force majeure" includes (but is not limited to) fires, flood, storms and other damage caused by the elements, strikes, riots, explosions, governmental action or inaction, currency restrictions, acts of God, insurrection and war and any other cause whether of the kind specifically enumerated above or otherwise which is not reasonably within the control of the party claiming 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 due to force majeure.

The foregoing shall not prejudice the responsibility to carry out the error handling procedures and other technical operational measures such as those specified in Rule 20.5 (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.

21.2 Liabilities and Responsibilities

21.2.1 Responsibilities of the Participants

21.2.1.1 General Principles

The Participants shall issue their instructions to the CSD in accordance with the Rules. If there is a transmission problem, Participants shall contact, as appropriate, the BoZ Help Desk. They shall monitor the progress of the transactions as closely as possible and report any irregularities detected to the BoZ Help Desk.

The Participants are individually responsible for:

(a) the correct fulfilling 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 Participant web-station and SWIFT Interface; and

(e) ensuring that they collect all data provided to them by CSD.

BoZ shall not be liable for any loss incurred by a Participant due to a failure by a Participant to monitor and reconcile its transaction flows, and each Participant hereby agrees to hold BoZ 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.

21.2.1.2 Correction of an Erroneous Order

If a Participant is aware that its Participant's account or an account managed by the Participant on behalf of a client has received securities erroneously or for an excess amount, the receiving Participant must inform the deliverer immediately and make the repayment as a new instruction. If appropriate, the delivering Participant should take the initiative in requesting the receiving Participant to make the correction.

If, the error has not been corrected on the day the correction was requested by the delivering Participant or on the day the delivering Participant was informed, the delivering Participant may claim interest for delay from the erroneously credited Participant. This interest is calculated on the nominal value of the securities on the basis of a penalty rate determined by BoZ from time to time.

If the delivering Participant reported the error before Intraday Auction Cut-Off and if the erroneously credited Participant does not effect the repayment on the same day, the interest rate applied by BoZ for overnight credit is charged for the period during which the securities were improperly held by the receiving Participant.

21.2.1.3 Access Control

Participants must comply strictly with the Procedures and the Rules governing access to the CSD. Only duly authorised Users who have been issued with an access control e-token by BoZ may use the system. Any offending Participant is liable for any damage resulting from non-compliance with the Procedures or from improper or fraudulent use thereof.

21.2.1.4 Obligations in the event of Constraining Events

In case of Constraining Events (i.e. events which affect the ability of any Participant to participate to the normal and usual extent in sending and receiving deliveries in the CSD), the Participant involved must inform BoZ immediately and do everything possible to:

(a) identify the irregularity together with BoZ;

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

(c) inform BoZ when the problem has been solved and the system is functioning normally again;

(d) carry out the operations specified in the relevant manual in order to help BoZ to solve a problem affecting the CSD and to return to a normal situation once the problem has been solved.

21.2.1.5 Obligations for Transactions Performed by Users

The Participant assumes full liability for every transaction performed by one of its Users.

21.2.2 Liabilities of Bank of Zambia
21.2.2.1 General

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

21.2.2.2 Force Majeure

If BoZ is prevented, hindered or delayed from or in performing any of its obligations under these Rules by a Force Majeure Event (as defined below), then BoZ's obligations hereunder shall be suspended for so long as the Force Majeure Event continues.

In this context, "Force Majeure Event" means any event which occurs due to reasons beyond BoZ's control that cannot be overcome by reasonable diligence and without unreasonable expense and including, but not limited to, any natural, technological, political or similar cause.

21.2.2.3 Responsibilities and liabilities of Bank of Zambia

BoZ as System Operator is responsible for:

(a) checking instructions received from Participants in accordance with these Rules and the User Manuals;

(b) the integrity, security and confidentiality of instructions, from the point at which they are accepted by the CSD until they are dispatched to the counterparty.

(c) keeping a record of all instructions received by the CSD according to relevant Zambian legislation;

(d) making available to the Participants the updated information concerning their payment flows and their current account as generated by the system.

(e) processing information received from Participants through the Montran gateway or from the web-station via VPN; and processing information received from other Participants provided that that their instructions are In Writing.

BoZ shall not be responsible for damage resulting from messages containing errors or for errors which cannot be detected by the checks described in the User Manual.

BoZ shall take all necessary reasonable measures to protect its computer system or 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 fallback procedures. If these measures have been taken, BoZ is no longer responsible for the possible breakdown or Constraining Event, even temporary, for any reason, of the computers or the programmes it uses or places at the disposal of its Participants for the processing of their CSD transactions, nor for the destruction or erasing of data stored in the computers or for possible fraudulent use thereof by third parties.

The liabilities of BoZ as Technical Operator are limited to:

(a) the correct operating of the system as described in its User and Technical Manuals;

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

(c) the provision of adequate capacity to meet the system performance;

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

BoZ shall not be liable for any failure of the CSD resulting from the incorrect use of the system by the Participants or due to software errors or communication failures. Except as provided in Rule 21.2.2, BoZ 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 BoZ's acts or omissions in connection with the CSD.

21.3 Claims and Compensation

21.3.1 Participants' Origin

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

21.3.2 Administrative Fees

BoZ may impose administrative fees against participants for non-compliance.

22 Dispute Resolutions

22.1 Law and Jurisdiction

These Rules are subject to the Laws of the Republic of Zambia.

In case of a dispute between Participants or between Participants and BoZ, the respective rights and obligations in relation to instructions processed through the CSD, and all other matters referred to in these Rules, shall be determined according to the Laws of Zambia and the provisions contained in the Rules and Procedures referred to in these Rules and Annexes.

22.2 Conciliation and Arbitration Procedures

22.2.1 Conciliation Procedure

In case of operational error or dispute between Participants, the Participants concerned shall sit together in order to find an amicable settlement and take all necessary measures to that effect.

If Participants fail to reach an amicable settlement within ten days of initiating dialogue, a party to the dispute shall refer, In Writing, the dispute to BoZ, 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 BoZ all necessary information and documentation to this effect.

However, if the dispute involves a Participant and BoZ on the other hand, the parties shall sit together to find an amicable settlement and take all necessary measures to that effect. If an amicable settlement fails, either party shall refer to arbitration.

22.2.2 Arbitration Procedure

Every Participant and BoZ agree to refer any dispute concerning the interpretation or implementation of these Rules on which the parties have not been able to find an amicable settlement or solution through a conciliation procedure within forty-five (45) days for arbitration in accordance with the Arbitration Act No 19 of 2000 of the Laws of Zambia.

23 Procedure in the Event of Insolvency of a Participant

23.1 Notification of Insolvency Events

A Participant must notify BoZ immediately upon becoming aware of

    (a) any Insolvency Event in respect of itself; and

    (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.

Upon receiving any notification under (a) above, and satisfying itself as to its veracity, BoZ shall promptly notify all other Participants. These notifications should comply with the conditions set in Annex 13 to these Rules.

Upon receiving any notification under (b) above, BoZ 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 BoZ, the relevant supervisor shall be consulted. To the extent that an Insolvency Event is admitted by the relevant Participant and that fact is communicated to BoZ, BoZ shall promptly notify all other Participants.

The provisions of Rule 3.9.1 (suspension) or Rule 3.9.2 (termination) may apply as a result.

23.2 Arrangements Following Notification

Upon being informed of the fact that a Participant has admitted an Insolvency Event pursuant to Rule 23.1, BoZ shall take all reasonable steps to ensure that, except with the consent of the appointed trustee, no further instructions are presented to the CSD for settlement by the insolvent Participant. BoZ shall, as a minimum, suspend the Participant and restrict all accounts under the control of that Participant.

The suspended Participant shall remain bound by the obligations resulting directly or indirectly from its participation in the CSD.

The Participants expressly acknowledge that the procedures for processing instructions described in Rules 8 to 14 inclusive continue to apply despite the Insolvency Event. This means among other things that the instructions entered into the CSD by Participants are irrevocable from the moment they are accepted for settlement by the CSD and cannot therefore be cancelled by Participants or third parties. Thus any Messages and Transactions which have already been accepted by the CSD shall remain within the CSD and shall be processed as follows:

(a) Transactions due for matching: these will be matched if any matching transactions have been entered by third parties prior to the suspension; no transactions showing the insolvent

Participant as the counterparty shall be accepted following suspension of the insolvent Participant.

(b) DvP transactions: instructions that have been passed to ZIPSS prior to the suspension will settle if there is sufficient cash in the ZIPSS Settlement Account. Instructions that have not yet been passed to ZIPSS shall be rejected by ZIPSS provided the Participant has been suspended in ZIPSS.

(c) FoP transactions: instructions will settle provided securities are available in the delivering account:

(d) Pledges: These shall remain pledged until further notice.

Subsequent to the suspension, BoZ shall accept instructions for the management of the insolvent Participants accounts and the accounts of his clients as follows:
(a) From Pledgees in respect of execution of Pledges: BoZ shall have the right to demand and inspect pledge agreements before executing Pledges by sale or appropriation;

(b) From a person authorised by the relevant court in Zambia to manage the affairs of the insolvent Participant under the National Payment Systems Act 2007.

(c) Make arrangements to hold any interest or redemption monies in a segregated account until a person is authorised to manage the affairs of the insolvent Participant.

24 Amendment to the Rules and Complementary Instructions

24.1 Amendment to the Rules

BoZ is responsible for the amendment of these Rules from time to time or the Annexes hereto, or any additional documents containing, inter alia, technical provisions and specifications for the CSD. Such amendments and additional documents shall become effective as an integral part of these Rules as per the date specified by BoZ, which date shall not precede communication to the Participants. BoZ shall give notice to each Participant of the modification thirty (30) calendar days before the entry into force. Such changes shall be deemed notified to the Participant when they have been posted on shared information systems to which the Participants have access. Unless a Participant resigns by way of notice In Writing in accordance with Rule 3.9.2 before the entry into force of the amendments to these Rules, the amendments will be deemed to be agreed upon by the Participants concerned.

24.2 Complementary Instructions

BoZ shall notify Participants on shared information systems about any complementary instructions on the organisation of the system and on the duties of the Participants. Such complementary instructions will be considered to form part of these Rules.

Annex 1 – Glossary

Short Name	Full Name	Explanation/Definition
	Annex	An Annex to these Rules
	Audit Trail	A sequential record of events having occurred in a system.
	Authenticated fax	A fax bearing a code or a signature that can be used as confirmation that the source of the fax is authentic and that the recipient can therefore act on its instructions with confidence that the instructions are genuine.
	Authorised Officer	Person duly authorised by the competent entity by all necessary action to legally bind the Participant.
	Authorised 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.
	Available Balance	The amount of securities that a Participant or its client has available to meet pending deliveries.
BIC	Business Identifier Code	An international standard for identification of institutions within the financial services industry and used in automated processing. They unambiguously identify a financial institution or a non-financial institution. A BIC consists of either eight (BIC8) or eleven (BIC11) contiguous characters. These characters comprise either the first three, or all four, of the following components: institution code, country code, location code, and branch code. The International Organisation for Standardisation has designated SWIFT as the BIC registration authority.
	Beneficial Owner	One or more Holders who own securities.
	Block	An action taken via a CSD menu function which prevents a specific Participant from sending SWIFT-format messages or instructions to the CSD and/or receiving such messages from the System.
	Business Day	A day on which the CSD is operating.
	Certification Authority	An entity that issues digital certificates that certify the ownership of a public key by the named subject of the certificate. This allows the counterparties to rely upon signatures of the private key that corresponds to the public key that is certified.
	Clearing House	A central processing mechanism through which financial institutions agree to exchange payment instructions or other financial obligations (eg securities). The institutions settle for items exchanged

		at a designated time based on the rules and procedures of the clearing house. In some cases, the clearing house may assume significant counterparty, financial or risk management responsibilities for the clearing system.
	Collateral	An asset that is delivered by the collateral provider to secure an obligation to the collateral taker. Collateral arrangements take different legal forms.
	Constraining Event	Processing, communications or other failure of a technical nature; Inaccessibility (total or partial) to facilities by means of which instructions 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 the transfers of securities within the CSD.
	Contingency Event	Any Constraining Event or any other event or circumstance specified by the BoZ.
CSD	Central Securities Depository	The BoZ Government securities Registration and Settlement System for Government, BoZ and other eligible issuers. It has been integrated with ZIPSS.
	Class	The capacity in which a Participant acts in the Secondary Market.
	Coupon Securities	Securities where interest is paid during the term of the loan.
	Cut-off	A designated time limit beyond which certain functions cannot be performed and must be terminated.
	Daily Value	The value held in the CSD and used to calculate the value of securities provided as collateral.
DvP	Delivery versus Payment	A mechanism used in securities transfers which ensures that the final transfer of the securities (the delivery) can be considered completed only if the final and irrevocable payment for the transaction has been made.
	Digital Certificate	An encrypted text which enables devices such as electronic tokens to be authenticated by the system and system components to authenticate each other using PKI methods.
	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	The end of Processing for the CSD.
	E-token (Smart–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. In other words, it contains the digital

		certificates that enable access to the system and the application of digital signatures.
	Fallback Site	The name usually used to refer to the site for back-up operations. Often such sites are used as development sites. Equally often they are operated remotely by engineered remote management tools.
FCO	Final Cut Off	The time at which ZIPSS ceases processing of ZIPSS transactions and cancels any queued transactions.
	Final Settlement	Settlement that is irrevocable and unconditional.
FIFO	First In First Out principle	A Queue management system under which instructions are processed strictly in chronological order, such that the "oldest" transaction will be tested first.
	Force Majeure Event	Any event due to any cause beyond the reasonable control of the relevant party, including (but is not limited to) fires, floods, storms and other damage caused by the elements, strikes, riots, explosions, governmental action or inaction, currency restrictions, acts of God, insurrection and war, technological, political and any other cause whether of the kind specifically enumerated above or otherwise which is not reasonably within the control of the party claiming force majeure.
FoP	Free of Payment	Delivery of securities with no corresponding transfer of funds.
	Gross Settlement	The settlement of funds and securities transfers, which is effected individually on a transaction by transaction basis, that is, without any netting of funds or securities.
	Haircut	The difference between the market value of an asset used as loan collateral and the amount of the loan. It is a parameter held at issue level in the CSD, which may be updated manually and is applied to the nominal value of the security.
	Holder	A person who either singly or in association with others is the owner of securities.
	House Account	An account operated by a Participant for the holding of securities beneficially owned by itself.
	Insolvency Event	Any collective measure provided for in the laws of Zambia 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.
	Interest	The price paid by a borrower to the lender for the loan.

	Interest Security	A security where only one payment of interest is made, at the redemption date of the loan.
	Interface	The common boundary between two functional elements, two layers of system architecture or between two physical devises that is defined by its functional characteristics, common physical characteristics of the link between them, signal or other characteristics.
ILF	Intra-day Loan Facility	Credit extended for a period of time that is less than one Business Day. The credit is provided by BoZ for the purpose of providing liquidity for a bank Participant through the ZIPSS.
ISO	International Organisation for Standardisation	The International Organisation for Standardisation is a worldwide federation of national standards bodies from some 140 countries. The mission of ISO is to promote the development of standardization in order to facilitate the international exchange of goods and services.
	In Writing	By secured e-mail or for Participants that cannot receive secured e-mail, by Authenticated faxes or by SWIFT type message MT 999. It also includes communicating via prescribed forms or authenticated letters.
ISIN	International Securities Identification Number	The identifier used in the System to identify a particular security. The format for ISIN is specified by ISO.
	Issuer	A Participant having the authority to issue and sell a security or other financial instruments, and which is therefore obligated on such security or financial instrument.
	Materials:	These Rules and each related Annex and rider and attachment thereto and hereto, as supplemented by related materials, including User Manuals, data, processes and other documentation provided by BoZ.
MOF	Ministry of Finance	The manager of government accounts. A ZIPSS user via BoZ. An issuer of Government securities in the CSD.
	Montran Gateway	A Montran solution for the integration of the ZIPSS/CSD with Participant banks' existing back office and client services. It links the bank's internal systems with the ZIPSS/CSD via standard message oriented middleware and the VPN for STP of all high and low value deliveries and payments.
	BoZ Administrator	Official of the BoZ involved with the administration of the CSD and its component modules.
	Nominal Value	The face value of the loan. This is also the value on which the rate of interest is based and usually the amount for which the loan is redeemed at maturity.

	Omnibus Account	An account managed by Participant in which the holdings and transactions of multiple holders are combined.
	Participation Agreement	An agreement between a Participant and BoZ under which the Participant agrees to be bound by the Rules and Procedures.
	Payment Event	The payment by the issuer of interest or redemption monies.
	Pledge	A delivery of property to secure the performance of an obligation owned by one party (debtor/pledger) to another (secured party). A pledge creates a security interest in the property so delivered.
	Pledger	An entity/individual that deposits own securities as pledge
	Pledgee	An entity/individual to which the pledge is made.
	Primary Participant	A Participant authorised by BoZ to participate directly in securities auctions.
	Primary Market	The initial issue and placement of securities including all the operations related to the primary sale.
	Procedures	The procedures and the methods designated in these Rules.
	Profile	A list of functions that can be accessed in the CSD that are assigned to a particular User or group of Users thereby limiting access to only those functions for that User or Group of Users.
PKI	Public Key Infrastructure	A highly secure method for securing access and information transfer based on the use of Public and Private keys. It allows for data encryption, server authentication, message integrity, and client authentication for connections between the user's browser and the application server. It can be used to achieve non-repudiation of transactions.
	Queue	A facility for managing Messages and Transactions that are pending in the CSD until the occurrence of an event that will allow further processing.
	Record Date	The date, set by the issuer, on which Participants must hold securities in order to be eligible to receive a coupon or interest payment or to participate in a partial or optional redemption.
	Redemption Date	The date on which the issuer has agreed to repay the loan. If this date is not a Business Day the loan is repaid on the following Business Day.
PUSA	Participant User Security Administrators	This officer is in charge of adding new users to the system by entering specific user information and creating the user profile using the ZIPSS/CSD interface. The new user would have been approved internally in the business unit based on the business approval rules before information on the new user is

		entered into the system. When requested, this Administrator would also modify existing user information and profile. Each Participant should appoint an officer who should ideally come from the business area.
REPO	Repurchase Agreement	An agreement in which one party sells a security to another party and agrees to repurchase it on a specified date for a specified price.
RTGS	Real Time Gross Settlement	The Zambian Government's Payment System for high and low value transactions which is referred to as ZIPSS.
	Role	The capacity in which a Participant acts in the Primary Market.
	Rules	These CSD Rules and each related Annex and attachment thereto and hereto, as supplemented by related materials, including User Manuals, data, processes and other documentation provided by BoZ (the materials), as any of these may be amended from time to time.
	Secondary Participant	These are Participants who do not have VPN connectivity to the CSD system and may participate directly or indirectly in an auction on their own account or on behalf of their clients. These are generally clients of the Primary Participants.
	Secondary Market	The trading of securities after they are issued and associated activities.
	Securities	A tradable asset of any kind which includes debt securities, equity, debentures and OMO instruments.
	Security Administrator	An Authorised Person at BoZ or a Participant that has access to the CSD for the purpose of maintaining User Details and the Profiles of Users in the CSD system.
	Services	All the services and facilities provided or to be provided by the BoZ pursuant to these Rules.
	Settlement Agent	A Participant that is an RTGS Participant which provides a cash settlement service for Securities Participant and Non Participant.
	Short Sale	The sale of a security that the seller or seller's principal does not own, or has not contracted for, at the time of sale or which requires the seller to borrow in order to make delivery.
	Situation Room	This is a fallback site at BoZ for Primary Participants that have a specific problem and are unable to access the central system via the VPN.
SWIFT	Society for Worldwide Interbank Financial Transactions	International institutions owned by banks which enable electronic messages to be sent securely between banks and financial institutions.

STP	Straight Through Processing	Straight Through Processing is a mechanism for eliminating paper and intervention processing such as re-keying of transactions between one system and another.
	Synthetic Account	A synthetic account identifies the type of account that a specific category of direct or indirect participant is allowed to manage. Synthetic accounts do not have a balance associated with them. A generic synthetic account will have an analytical account instance for every ISIN and the securities account balance is associated with the analytical account
	System Administrator	An authorised person at BoZ that has access to the CSD for the purpose of ensuring the system is running efficiently and effectively. A System Administrator shall respond to individual users and system challenges and facilitate the resolution of these problems.
	Timetable	This shows the events that occur during the CSD day and the activities which can be performed at different stages.
	Trading Ceiling	A limit set by a Settlement Agent for each of the Securities Dealers or Non Dealers for which it acts, which enables the Settlement Agent to limit its liability.
	User	A staff member of a Participant who is entitled, under these Rules and under the rules and procedures of that Participant, to use specific CSD facilities, and has been issued with an access control e-token, PIN, username and password.
	User Manual	User Manuals and Guides defining how to use the CSD, issued by BoZ from time to time.
UID	Unique Identifier	The identifier used in the system to identify OMOs and instruments other than Treasury bills and Government bonds. It also identifies secondary Participants in the CSD system.
VPN	Virtual Private Network	A communication mechanism managed by BoZ which allows secure communications between Participants.
	Web-station	A computer configured to access the CSD via the VPN.
ZECHL	Zambia Electronic Clearing House Limited	The national interbank clearing facility, established to provide efficient, reliable, secure and cost effective interbank clearing services to the banking industry in Zambia.
ZIPSS	Zambia Interbank Payment and Settlement System	The real-time gross settlement system or any other settlement system adopted and operated by BoZ that facilitates electronic transfer funds among Participants.

Annex 2 – Participant Agreement

1.0 THIS AGREEMENT is made and entered into at _____, this _____ day of _____, 20_____, by and between the Bank of Zambia, Bank Square, Cairo Road, Lusaka (Name and Address) and _____ (Name and Address) (hereafter referred to as the "Participant").

NOW THEREFORE, in consideration of the promises and mutual covenants made one to the other, be it and it is hereby agreed as follows:

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.

The Parties agree that 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.

2.0 Authority

2.1 Representations, Warranties and Covenants:

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 enforceable, legal, valid and binding obligation.

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

  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, fund 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 the Bank of Zambia, the Participant agrees to supply the Bank of Zambia with copies of any such consents, instructions and authorisations required of the Participant under (iv) or (v).

The Participant further agrees to immediately notify the Bank of Zambia if it suspects or knows of any circumstances that could or would cause a breach of any representation or warranty hereunder.

3.0   Authorised Persons

3.1   The Participant shall deliver upon execution of this Agreement and from time to time, as appropriate, the names and specimen signatures of persons duly authorised by all necessary action to access data and to provide instructions with respect to bank accounts, fund 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 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 the Bank of Zambia to act in reliance thereon in executing instructions. Any change in the name or other relevant information about Authorised Persons shall be delivered to the Bank of Zambia at least 2 business days prior to the effective date of such change.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals the date and place first above mentioned.

_____
Name of Participant

_____
Signature of Participant

_____
Name of the Bank of Zambia Representative.

_____
Signature of the Bank of Zambia Representative.

4.0 CSD APPLICATION FORM FOR INDIVIDUAL INVESTORS

	Application to Join the CSD	
To:	Director Financial Markets Department Bank of Zambia P O Box 30080 Lusaka Zambia	

I	**Details of Prospective Investor**	
From:	Name of Applicant (s):	
	Date of Birth	
	NRC/Passport	
	Sex	
	Physical and Postal Addresses in Zambia:	
	Cell/Telephone Number:	
	Fax Number:	
	E-mail:	

II	**Details of Settlement Bank**	
	Name of settlement Bank	
	Name of settlement Branch	
	Account Number of Settlement Branch	
	Address of settlement Bank	
	Name of Contact Person at the Settlement Bank:	
	Telephone Number:	
	Fax Number:	
	E-mail:	

III	**Persons Authorised to issue instructions on the CSD Account**	
	Name	**Authorised Signature**
A		
B		
C		

IV	Name of Next of Kin
A	
B	
	Preferred Start Date: *(This is the preferred date on which the Applicant wishes to be admitted as a Participant of CSD.)*

The above named body corporate/ Applicant hereby applies for membership as a Participant in CSD. 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 Rules of CSD in force from time to time.
2. The Applicant will observe and comply with the requirements and directions of CSD and any relevant statutory authority in force from time to time relating to CSD.

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

4. The Applicant undertakes not to impair the overall efficiency of CSD 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 not only relate to the CSD, but to every other Participant who has agreed to observe and comply with the Rules.

Terms not defined in this application have the same meaning as in the Rules of CSD.

FOR OFFICIAL USE

PRIMARY PARTICIPANT

SECONDARY PARTICIPANT

Checked by…………………………….   Approved by……………..……………..
Bank of Zambia   **Bank of Zambia**

5.0 CSD APPLICATION FORM FOR CORPORATE INVESTORS

Application to Join the CSD	
To:	Director Financial Markets Department Bank of Zambia P O Box 30080 Lusaka Zambia

I	**Details of Prospective Investor**	
From:	Name of Applicant:	
	Date of Incorporation	
	Place of Incorporation	
	Zambian Company Number (e.g PACRA number)	
	TPIN	
	Physical and Postal Addresses in Zambia:	
	Name of Contact Person of the Investor:	
	Company Cell/Telephone Number:	
	Company Fax Number:	
	E-mail:	

II	**Details of Settlement Bank**	
	Name of settlement Bank	
	Name of settlement Branch	
	SWIFT BIC	
	Account Number of Settlement Branch	
	Address of settlement Bank	
	Name of Contact Person at the Settlement Bank:	
	Telephone Number:	
	Fax Number:	
	E-mail:	

III	**Persons Authorised to operate the CSD Account**	
	Name	**Authorised Signature**
A		
B		
C		
	Preferred Start Date: *(This is the preferred date on which the Applicant wishes to be admitted as a Participant of CSD.)*	

The above named body corporate/ Applicant hereby applies for membership as a Participant in CSD. 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 Rules of CSD and the procedures detailed in the User Manual (where necessary) in force from time to time. Primary participants should collect a copy of the Rules and the User Manual which are currently in force.

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

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

4. The Applicant undertakes not to impair the overall efficiency of CSD 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 not only relate to the CSD, but to every other Participant who has agreed to observe and comply with the Rules and User Manual where applicable.

Terms not defined in this application have the same meaning as in the Rules of CSD.

FOR OFFICIAL USE

PRIMARY PARTICIPANT

SECONDARY PARTICIPANT

Checked by……………………………….   Approved by……………..……………..
Bank of Zambia   **Bank of Zambia**

Annex 3 – Form for Addition or Modification of Participant Information

Note: Fill in the applicable fields only.

	Application to Add or Change Participant Information in CSD	
To:	Director Financial Markets Department Bank of Zambia P O Box 30080 Lusaka Zambia	
From:	Name of CSD Participant:	
	Date of Birth:	
	Place of Incorporation	
	Zambian Company Number/ Zambian Registered Body Number/ Zambian Business Number	
	NRC/Passport	
	TPIN	
	Registered Office Address/ Principal Place of Business in Zambia/ Physical and Postal Address in Zambia	
	Complete the additions or changes you want to be effected in the CSD *Note: Fill in the applicable fields only*	
	Requested action:	Add / Change
DETAILS OF THE PARTICIPANT		
	Participant Name:	
	Participant address:	
DETAILS OF SETTLEMENT BANK		
	Name of settlement Bank	
	SWIFT BIC	
	Account Number of Settlement Branch	
	Address of settlement Bank	
DETAILS OF PERSON (S) AUTHORISED TO ISSUE INSTRUCTIONS ON THE CSD ACCOUNT		

Annex 4 – BIC Codes

BANK	SWIFT BIC
BANK OF ZAMBIA	BAZAZMLU
AB BANK ZAMBIA	ABBAZMLU
ACCESS BANK	AZAMZMLU
BANC ABC	FMBZZMLX
BANK OF CHINA	BKCHZMLU
BARCLAYS BANK	BARCZMLX
CAVMONT CAPITAL BANK	CVMTZMLU
CITIBANK	CITIZMLU
ECOBANK	ECOCZMLU
FINANCE BANK	ZFBAZMLU
FIRST ALLIANCE	FALLZMLU
FIRST NATIONAL BANK	FIRNZMLU
INDO ZAMBIA BANK	INZAZMLX
FIRST CAPITAL BANK	ICZAZMLU
INTERMARKET BANKING CORPORATION	IDHZZMLU
INVESTRUST BANK	VSTRZMLU
STANBIC BANK	SBICZMLX
STANBIC ZAMBIA CUSTODIAL SERVICES	SBNZZMLX
STANDARD CHARTERED BANK	SCBLZMLX
STANDARD CHARTERED BANK SECURITY SERVICES	SCSLZMLX
UNITED BANK FOR AFRICA	UNAFZMLU
ZAMBIA NATIONALCOMMERCIAL BANK	ZNCOZMLU

Annex 5 – Procedure for Rediscounting

The CSD accommodates a special type of DvP transaction that will be identified as operation type Premature Disinvestment. The operation is created using single SWIFT MT 543 entered by the Participant requesting the Rediscount.

The cash value of the transaction is calculated by the system using the following procedure:

1. Computation of Rediscount Price

The Rediscount Price (RDP) is equal to the Daily Value of the security being rediscounted.

$$RDP = Daily\ Value$$

The daily value is determined based on the type of security using the following formulas:

Treasury Bills

$$Daily\ Value = \frac{1}{1 + yield * \frac{nrDays}{YearBase}}$$

where:

$Yield$ is the current yield rate expressed as percentage (%) obtained on the most recent auction for this instrument and it is managed at the instrument level,

$nrDays$ is the number of days from settlement date (valuation date) until maturity;

$YearBase$ is the number of days in year according to the Day Count Convention.

2.   Computation of Income

$$Y = FA\ x\ (RDP - AWP)$$

where:

Y is the Income earned on the rediscount,

FA is the Face Amount of the securities being rediscounted,

RDP is the Rediscount Price calculated in Step One,

AWP is the Average Weighted Price of the account where the securities are being rediscounted.

3.   **Computation of Tax**

$T = s\,x\,Y$

where:
T   is the Tax payable,
s   is the Tax Rate applicable defined in the participant or client taxation scheme.

4.   **Computation of Commission**

$CM = c\,x\,Y$

where:
CM   is the Commission,
c   is the Commission Rate defined as system parameter in the CSD.

5.   **Computation of Penalties**

Income Penalty
$IP = i\,x\,Y$

where:
IP   is the Income Penalty, i is the Income Penalty Rate defined as system parameter in the CSD.

Price Penalty
$PP = p\,x\,FA\,x\,RDP$

where:
PP   is the Price Penalty,
p   is the Price Penalty Rate defined as system parameter in the CSD,
FA   is the Face Amount being rediscounted,
RDP   is the Rediscount Price.

Cost Penalty
$CP = c\,x\,FA\,x\,AWP$

where:

CP   is the Cost Penalty,
c   is the Cost Penalty Rate defined as system parameter in the CSD,
FA   is the Face Amount being rediscounted,
AWP   is the Average Weighted Price of the account where the securities are being rediscounted.

Total Penalty

$$TP = IP + PP + CP$$

where:

TP   is the Total Penalty payable,
IP   is the Income Penalty,
PP   is the Price Penalty,
CP   is the Cost Penalty.

6. Computation of Net Proceeds

$$NP = FA \ x \ P - (T + CM + TP)$$

where:

NP   is the Net proceeds,
FA   is the Face Amount being rediscounted,
RDP   is the Rediscount Price,
T   is the Tax payable,
CM   is the Commission,
TP   is the Total Penalty.

Annex 6 – Overnight Repo Formula

Determination of Interest Amount

Interest Payable = Loan Amount x OLF rate x $\dfrac{n}{365}$

    where
    n = tenor of the loan normally 1 day

Determination of the required value of the Treasury bills if used as Collateral

Step 1: Determination of Margin Cover (required Present Value/Market Value) of securities is as follows:

$$MV = Loan\ Amount \times (1 + Haircut\ Margin)$$

where:
Loan Amount is the amount of the overnight loan the commercial bank wants to borrow.

Haircut is the amount of haircut to be applied on the loan.

Step 2: Determination of the required face value of securities. The market value of the collateral calculated in Step 1 above is then used to calculate the required face value as follows:

$$FV = MV \times \left(1 + \frac{rn}{365}\right)$$

Where:
- **MV**   is the required market value of the security being repoed and is calculated as above;
- **r**   is the *current* weighted average yield rate in decimal obtaining on the most recent Treasury bill auction;
- **n**   is the number of days between settlement date and maturity date of the repoed security; and
- **FV**   is the face value of the security to be repoed.

Determination of the required value of the Government Bonds if used as Collateral

Step 1: The calculation of the MV for government bonds is the same as Step 1 under Treasury bills above.

Step 2: The required face value (F) of Government bonds shall be determined by application of the following formula:

$$F = \left[\frac{MV}{\left(\dfrac{C/2}{\left(1+\frac{r}{2}\right)^w} + \dfrac{C/2}{\left(1+\frac{r}{2}\right)^{1+w}} + \dfrac{C/2}{\left(1+\frac{r}{2}\right)^{2+w}} + \cdots + \dfrac{1+C/2}{\left(1+\frac{r}{2}\right)^{n+w}} \right)} \right]$$

where

MV   *is* the required market value of the security being pledged

C   is the coupon rate originally applied to the bond at issue date

r   is the *current* weighted average yield rate obtaining on the most recent Government bond auction

n   is the total number of coupon periods remaining after the next coupon payment;

w   is number of days between settlement date and the next coupon payment date divided by the original number of days in coupon period;

F   is the face value of the security to be pledged as collateral

Determination of the required value of the BoZ OMO Term Deposits if used as Collateral

Step 1: The required value (*V*) of OMO instruments shall be determined by application of the following formula:

$$V = MV \times \left(1 + \frac{r \times d}{365}\right)$$

where

MV   is the required market value (see **Step 1** under Treasury bills) for the calculation

r   is the *previous* business day's weighted average interbank rate; and

d   is number of days between settlement date and the maturity date of the Repo/Term Deposit(s) so pledged.

Annex 7 – Formula for Required Securities for a Repo under OMO

Determination of the required **Government securities** will be done as follows:

Step 1: Calculation of the repurchase price:

$RP = PP + AI$

where:
RP = Repurchase price
PP = Purchase price
AI = Accrued interest

Step 2: Determination of Current Cover
The Current Cover is 100% when the BoZ is borrowing funds, that is, no haircut will be applied when BoZ is lending a haircut is applied.

$MC = RP \times CC$

where:
MC = Margin cover
RP = Repurchase price
CC = Current cover

Step 3: Determination of the face value of securities. The formula to be applied will be as follows:

$FV = PV \left[(1 + (\frac{RxN}{365})] \right.$

where:
FV = Face value
PV = Present value
R = Latest yield rate of the security being pledged
N = Number of days remaining to maturity of repoed securities

Annex 8 – Formula for Required Securities for a Secured Loan under OMO

Determination of the required **Government securities** will be done as follows:

For each secured loan, a haircut will be applied to the securities which will be used as collateral.

Government Securities

> **Step 1:** Calculate the interest amount.

$$I = P \, x \, R \, x \, (\frac{D}{365})$$

where
I = Interest Amount
P = Principal
R = Bid Rate
D = Number of Days

> **Step 2:** Determination of the required Present Value of securities. The relevant Current Cover will be used when the BoZ is lending funds and the securities pledged are Treasury bills or Government bonds, respectively.

$$MC = [P + I] \, x \, CC$$

where:
MC = Margin cover
P = Principal
I = Interest amount
CC = Current cover

> **Step 3**: Determination of the future (face) value of securities. The formula to be applied will be as follows:

$$FV = PV \, [(1 + (\frac{RxN}{365}))]$$

where:
FV = Face value
PV = Present value
R = Latest yield rate of the security being pledged
N = Number of days remaining to maturity of the pledged securities

OMO Term deposits

> **Step 1:** Determination of the required value of **OMO deposit** will be done by the application of the following formula:

$$V = MV \, x \, (1 + \frac{R x N}{365})$$

V = Required value

MV = Market value

R = Previous day's weighted average interbank rate

N = Number of days between settlement date and maturity date of the Instrument.

Step 2: Application of appropriate haircut on the OMO Term deposit.

Annex 9 – Applicable Formula for ZECHL Pledges

Determination of the required value of Treasury bills will be done as follows:

$$\text{Required Value} = \frac{Daily\ Value\ X\ Face\ Amount}{(1 + Haircut)}$$

where: the Face Amount is the nominal face value of the Treasury bills to be pledged.

    the haircut on Treasury Bills is currently at 5 percent.

    the Daily Value is calculated as using the following formula:

$$Daily\ Value = \frac{1}{1 + yield * \dfrac{nrDays}{YearBase}}$$

    Where:

Yield	is the current yield rate obtained from the most recent auction.
nrDays	is the number of days between settlement date and maturity date of the pledged security.
Year Base	is the number of days in a year according to day count convention (Actual/365 days in a year).

Annex 10 – Timetable

The table below shows the events that occur during the CSD day and the activities which can be performed at different stages.

CSD Event	Time	Activities	How is Activity Initiated?
Start of Day	8.00 hrs	The business date is moved to current system date. Housekeeping functions can be undertaken such as maintenance of parameters, participant details, user maintenance	Initially it will be manual and then subsequently automated.
Start of Business Day	8.15 hrs	The system is ready to process available future transactions and new transactions.	Initially it will be manual and then subsequently automated
Intraday Auction Cut Off	16.00 hrs	The system processes auction related transactions only when the intraday auction window is open. No auction related transactions can be undertaken after the intraday auction cut-off.	Initially it will be manual and then subsequently automated
DvP Cut Off	16.20 hrs	The system processes DvP Transactions only when DvP service is open. When DvP is executed, all DvP transactions that are not in final status are cancelled. Also all DvP transactions that are not matched will be automatically cancelled.	Initially it will be manual and then subsequently automated
FOP Cut Off	16.25 hrs	The system processes FoP Transactions only when FoP service is open. When FoP is executed, all FoP transactions that are not in final status are cancelled. Also all FoP transactions that are not matched will be automatically cancelled.	Initially it will be manual and then subsequently automated
End of Business Day	16.30 hrs	All business transactions cannot be processed beyond this time. Housekeeping functions can take place.	Initially it will be manual and then subsequently automated
End of Day	16.35 hrs	CSD system closes. Back-up and archiving can take place.	Initially it will be manual and then subsequently automated

The BoZ reserves the right to change the Timetable as and when deemed necessary.

Annex 11 – Situation Room Authorisation Form

BANK *Of* **ZAMBIA**

SITUATION ROOM AUTHORISATION FORM

Date and Time   _____

Institution /Bank   _____

We hereby authorise the following users to access the CSD system at Bank of Zambia in the Situation Room on behalf of our institution.

User 1

Name: _____

Position: _____

Signature: _____

Email: _____

User 2

Name: _____

Position: _____

Signature: _____

Email: _____

Telephone Number**:** _____

Fax Number: _____

REASON FOR USING THE SITUATION ROOM:

....

....

....

....

....

....

Name of Authoriser   Designation:

_____   _____

Signature

_____

Name of Authoriser   Designation:

_____   _____

Signature

_____

Name and Signature of Authoriser (BoZ Representative)

_____

Date and Time: _____

BANK *Of* ZAMBIA

Annex 12 – Annual Audit Form

Participant: [Name]
Self-Assessment for [Year]

Please respond to the following questions

A.   CSD-Related Fraud

1)   Has your organisation experienced any CSD related actual or attempted fraud during the year?

2)   If so, was this reported to Bank of Zambia in accordance with the CSD 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?

B.   Contingency Planning and Contingency Facilities

1)   Does your organisation have a documented contingency plan for its CSD operations?

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

3)   Does your organisation maintain fallback computer facilities and/or fallback communications for the VPN interface used for CSD communications?

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

5)   Have your contingency plans been tested during the year and business continuity risks identified?

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

C.   System down time and resilience

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

2) If so, were these reported to the Bank of Zambia and recorded in a Contingency Event Log in accordance with the CSD procedures?

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

Name and Signature of Participant

Annex 13 – Help desk

BoZ has been designated to provide the help desk services.

Contact details are as follows:

Telephone: 233553/222932

Fax: 226707

Email: csd@boz.zm

Postal address: CSD Help Desk
                      Financial Markets Department
                      Bank of Zambia
                      P O Box 30080
                      LUSAKA

Annex 14 – Contingency Event Log Form

BANK *Of* ZAMBIA

CONTINGENCY EVENT LOG FORM

Name of Commercial Bank: Date and Time of Incident: Date and Time Incident was Resolved: Duration of Downtime:
Description of Incident
Description of How the Incident was Resolved

Annex 15 – Notification

Any notice pursuant to these Rules (unless otherwise specified) be conveyed by mail, e-mail, fax or delivery by messenger and shall be effective upon receipt. Bank of Zambia may also comply with a notice requirement by posting any required notice on the shared network portal to which Participants have access.

Any notice shall be delivered to:

The Director
Financial Markets Department
Bank of Zambia
P O Box 30080
Lusaka
Zambia

Or

Emailed to csd@boz.zm

Faxed to 221189/226707

References

1. Arbitration Act No. 19 of 2000

2. Bank for International Settlements and International Organisation of Securities Commissions (2012) Principles for Financial Market Infrastructures

3. Bank of Zambia Act No 43 of 1996

4. Electronic Communications and Transactions Act of 2009.

5. National Payment Systems Act of 2007

6. Securities Act No. 41 of 2016