

SRAG Business Operating Rules, 2011





In exercise of the powers conferred upon it, under the provisions of Article 60(2), of the Banking Business (Organization) Act, 2004, the Governor of the Bank hereby makes the following Rules: -

CHAPTER I
Preliminary Provisions
Title and Commencement

1. These Rules may be cited as the, "Sudanese Real time Automated Gross Settlement System Business Operating (SRAG) Rules, 2011" and shall come into force as from the date of the system goes live.

Interpretation

2. In this Rules,:

(a) The words and phrases, set out therein, shall have the same meanings, assigned thereto, in the Banking Business (Organization) Act, 2004,

(b) Any definition or concepts, system terms and terminology set out therein, shall have the same meanings, assigned thereto, in the SRAG Manual

Circulation

3. This Rules is provided to all Participants in the SRAG system. It will also be made available to prospective Participants on application for membership.

Rules purpose

4. The purpose of this Rule is to clearly and unambiguously define the rules for participation in SRAG that Participants in SRAG have agreed.

Reference documents

5. The Operating Rules make reference to the following documents as a guideline for usage of SRAG:
 - (a) SRAG Operating Procedures
 - (b) SRAG Liquidity Policy Paper



CHAPTER 2 **The Central Bank (CBOS) Responsibilities**

CBOS as owner and operator

6. CBOS is the owner and operator of SRAG and has full responsibility and control of the day-to-day business operations of the Settlement Accounts, and the day-to-day management of all routine daily activities; mainly is responsible for:

- [1] Regulating, administering and monitoring SRAG.
- [2] providing detailed user guides and operational procedures;
- [3] All data on the system is the property of CBOS.
- [4] Invoking contingency arrangements for SRAG.
- [5] The technical aspects of SRAG.

CBOS as settlement bank

7. The provisions of Article 35.1 above with respect to settlement account funding shall not apply to CBOS in its capacity as a Participant.

CBOS as an ASA

- [1] As an Authorized Settlement Agent CBOS can debit and credit any settlement account in RTGS under the powers vested in it by the Bank of Sudan Act, 2002, and of the Banking Business (Organization) Act, 2004
- [2] CBOS will act as an agent of banks in the following circumstances:
 - (a) In order to ensure business continuity, i.e. when it is not possible for a bank to make payments due to unforeseen circumstances such as technical difficulties, a *force majeure* or any other circumstances that may be deemed by CBOS as warranting intervention as an agent.
 - (b) For purposes of settling the obligations resulting from National Switch and ECC clearing.
- [3] In the case of CBOS acting on behalf of a bank for business continuity purposes it shall be the paying bank's responsibility to provide CBOS as agent and originator of the FSI with sufficient, correct and clear information to enable CBOS to make the payment.



- [4] In the case of CBOS acting on behalf of any authorised settlement agent, it shall be the responsibility of EBS to provide CBOS as agent and originator of the concurrent batch of FSIs with sufficient, correct and clear information to enable CBOS to make the payments.
- [5] CBOS as the originator shall be responsible for transmitting correctly the details provided to it by the paying bank or any authorised settlement agent.
- [6] CBOS shall notify the paying bank via SRAG of the outcome of the payment.

CBOS as an agent for business continuity purposes

- [1] CBOS is authorised to act on behalf of all settlement banks registered in SRAG in order to ensure business continuity in the Sudan, i.e. that are registered in SRAG as Participants in the settlement agreement.
- [2] CBOS will not act as an agent for registered settlement banks in the normal course of events in the Sudan.
- [3] CBOS will only act on behalf of settlement banks in cases where it is not possible for banks to make payments of systemic importance.
- [4] Scenarios that may warrant the intervention of CBOS as an agent include technical difficulties on the side of the settlement bank, a *force majeure* or any other circumstances that may be deemed by CBOS as warranting acting as an agent on behalf of a settlement bank.
- [5] CBOS also has the discretion to determine whether a payment is of systemic importance or not.
- [6] CBOS in its capacity as authorised agent could be requested by a settlement bank to perform the following types of transactions on behalf of the bank:
 - (a) Bank transfers;
 - (b) Client transfers;
 - (c) Standing intra-account funding arrangements; and
 - (d) Intra-account transfer instructions.

EBS as an agent for National Switch and ECC clearing purposes

- [1] EBS is authorised to act on behalf of all CBOS Clearinghouse Participant banks who are also registered as settlement banks in SRAG, i.e. that are registered in SRAG as Participants in the settlement agreement.
- [2] Both National Switch and ECC clearing obligations will be settled on the Clearing LOM in SRAG.
- [3] EBS in its capacity as operator of the clearinghouse in the Sudan will be responsible for:



- (a) Ensuring that the concurrent batch file containing clearing obligations is generated in the correct format for upload into SRAG; and
- (b) Sending the file timeously to CBOS via email for upload into SRAG:
 - o 09:00 for National Switch
 - o 14:30 for ECC

- [4] CBOS has the right to manage the instructions that are queued on the Clearing LOM and can remove concurrent batches from the Clearing LOM queue.
- [5] CBOS as system administrator has the discretion to extend the Finalisation event, should this be required to ensure that the concurrent batches on this LOM settle.
- [6] CBOS as system administrator also has the discretion to levy a discretionary penalty on any settlement bank that is deemed by CBOS to be the cause for the extension of any event in SRAG.
- [7] It shall be the paying bank's responsibility to fund its net debit position on the clearing LOM for the National Switch, and ECC as specified by the CBOS Regulation
- [8] Should a settlement bank have insufficient funds or credit facilities to cover its net debit position, it is the responsibility of the bank to obtain funding in the interbank market or to approach CBOS in order to arrange for additional liquidity, the terms of which will be determined by CBOS.

6. CBOS as overseer

- [1] The Overseer is responsible for ensuring that SRAG is operated in a safe and efficient manner.
- [2] SRAG Participants agree to provide to the Overseer, in writing, and within five (5) business days of any request, any information relating to the Participant's operation of the SRAG system that the Overseer may require. Failure to supply information as requested by the Overseer may be grounds for suspension in terms of these rules.
- [3] As overseer CBOS needs to:
 - (a) Monitor the activities of each Participant in the SRAG system electronically and by physical inspection.
 - (b) Be satisfied that the Participants are operating SRAG strictly in accordance with these rules that govern SRAG.
 - (c) Control the risk management aspects in the system that include but are not limited to credit and liquidity risk.



CHAPTER 3

USAGE OF SRAG

7. Compliance

All Participants and CBOS shall comply with these Operating Rules.

8. SRAG utility

- (a) Without prejudice to any laws of the Sudan, all Participants shall use SRAG for effecting interbank payments in Sudanese Pounds which are either urgent or in excess of SDG500,000.
- (b) CBOS retains the right to alter the amount thresholds at their own discretion.
- (c) CBOS also retains that right to introduce currencies other than SDG in SRAG in future.

9. Current interbank agreement

Any current Interbank agreements relating to Payments, such as the CBOS Clearinghouse Rules, shall continue to remain in force except to the extent that they are in conflict with these operating rules.

10. Amendment of operating rules

- (a) CBOS is responsible for SRAG rules and may amend them periodically by deletion, substitution or addition.
- (b) Participants may submit proposals for changes in these Rules. Such proposals should fully describe the purpose and benefit of the change being proposed and should be sent to CBOS. CBOS will, at its absolute discretion, rule on the acceptability or otherwise of proposals to change SRAG rules.
- (c) Where any amendment is made, CBOS shall give all Participants reasonable notice in writing of the amendment.



CHAPTER 4

PARTICIPATION

11. Participation types

The following Articles describe the types of Participants in the SRAG system. A list of Participants is attached as Appendix A.

12. Participation as a settlement bank

A settlement bank is a Participant that:

- (a) has a direct connection to SRAG through the SRAGt_webclient (rtgs) interface and has a settlement account in SRAG;
- (b) Meets the admission criteria for participation as a settlement bank.

13. Participation as an ASA

[1] An authorised settlement agent is a Participant that:

- (a) Has a direct connection to SRAG through the SRAGt_webclient (rtgs) interface but does not have a settlement account in SRAG.
- (b) has been authorised by a settlement bank to submit funds settlement instructions to SRAG on its behalf, either explicitly in terms of a written and duly signed agreement to that effect or by virtue of a business relationship between the Agent and the Participant, for example where the Agent is tasked with capturing the CBOS Clearinghouse obligations.

[2] An authorised settlement agent may act on behalf of a settlement bank for a specific business purpose, such as ensuring business continuity in SRAG or for submitting the ECC or National Switch clearing results to SRAG, or any other system approved by the CBOS

[3] An authorised settlement agent does not have access to the intraday liquidity facilities (ILFs) at CBOS.

[4] CBOS will be registered as an authorised settlement agent in SRAG and may assign authorised settlement agent status to any entity at its own discretion.

14. Participant accounts

[1] The following conditions are for Participants Accounts:-



- (a) It is mandatory for all Participants of SRAG to maintain a Settlement Account in SRAG that corresponds to the Participant's current account in the CBOS general ledger. The conditions stipulated by CBOS from time to time shall apply for operation of the Settlement Account.
- (b) It is mandatory for all Participants of SRAG to maintain a General Liquidity Optimising Mechanism (LOM) Account in SRAG that is a sub-account the Participant's settlement account in SRAG.
- (c) It is mandatory for all Participants of SRAG to maintain a Clearing LOM Account in SRAG that is a sub-account the Participant's settlement account in SRAG

[2] CBOS will open and will maintain a Settlement Account, Clearing LOM Account and General LOM Account for the Participant.

[3] The Accounts above are to be operational until it is suspended or closed by CBOS.

15. Responsibility for maintaining sufficient liquidity

- (a) The Participants shall ensure that at any given time they are maintaining sufficient balances or credit on their accounts for effecting payments generated by them or an authorised settlement agent on their behalf.
- (b) It is the responsibility of each Participant to monitor their settlement and LOM accounts for the purpose of maintaining liquidity and complying with the rules of SRAG.
- (c) CBOS shall have no responsibility for monitoring or funding accounts of the Participants.

16. CBOS as a Participant

The provisions of article 11 above with respect to settlement accounts shall not apply to CBOS in its capacity as a Participant.

17. Collateral for intraday borrowings

CBOS may stipulate the requirement of collateral for making available the facility of Intraday borrowing in the accounts of the Participants. All Participants shall comply with the stipulation.

18. Position monitoring

SRAG shall provide account monitoring, reporting and enquiry facilities operating in a real-time environment to the Participant, which shall provide to each Participant an immediate visibility of the position in its account at CBOS. This facility shall enable the Participant to manage its liquidity.



CBOS in its role as regulator and operator of SRAG shall have full access and authority to generate transactions and access information on Participant accounts.

19. Record of Evidence

The account maintained by the Participant in SRAG is the official record of the transactions executed and shall be binding on CBOS and the Participant in the absence of manifest error. The SRAG system is the official record of the Participant balances intraday, but the CBOS GL system remains the official record of the balances that Participants have in their current accounts after end-of-day updates from SRAG.

20. Participant access to the system

- (a) Participants shall be given access to SRAG by CBOS as the system administrator.
- (b) Once CBOS has given the Participant access to the system, the Participant is responsible for maintaining its own access to SRAG, e.g. setting the authorisation levels for transactions in SRAG, giving users registered by CBOS access to specific functions in the system, etc.
- (c) CBOS shall only maintain a Participant's access to the system on the Participant's behalf in Business Continuity circumstances.

21. Registration of users

CBOS as system administrator shall be responsible for the registration of all users of SRAG in the system.

Registered Participants shall apply to CBOS for the addition or removal of a user using a prescribed form, as provided by CBOS.

22. Maintenance of user access

Once a user has been registered by CBOS at a Participant's request, the Participant is responsible for maintaining the details of that user's access.



CHAPTER 5 **Admission**

23. Admission criteria

[1] Participation as a settlement bank is compulsory for all banks in the Sudan that meet the admission criteria outlined in these rules.

[2] An organisation becomes eligible to apply for participation if that organisation:

- (a) Is an organisation licensed under the Banking Business (Organization) Act, 2004, as a commercial bank
- (b) Agrees to operate in accordance with SRAG Rules and applicable procedures;
- (c) Agrees to be trained by CBOS or a party appointed by CBOS in the use of the systems;
- (d) Agrees to abide by the rules and responsibilities as provided for in this document;
- (e) Agrees to pay the subscription, transaction, penalty and/or other fees as set by CBOS;
- (f) Agrees to supply any documentation as CBOS may reasonably require;
- (g) Has the infrastructural facilities and software, as specified by CBOS from time to time;
- (h) Has access to SRAG ILFs at the discretion of CBOS;
- (i) Is subject to the CBOS Liquid Asset Requirement;
- (j) Maintains a Current Account with CBOS;
- (k) Is a member of the CBOS Clearinghouse.
- (l) Or any other criteria issued by CBOS from time to time

(3) CBOS shall additionally monitor the maintenance of the specified criteria from time to time and Participants shall permit access to their operations and facilities to CBOS for the purpose of such monitoring.



CHAPTER 6 **Suspension**

24. Reasons for suspension

[1] CBOS may suspend a Participant if it determines, in good faith, on the evidence available to it, that the Participant is in such financial or operating condition that its continuation as a Participant would cause a significant disruption to the services or would jeopardise the interests of RTGS or other Participants.

[2] CBOS may suspend the membership of an RTGS Participant for any of the following reasons:

- (a) The Participant becomes aware of any insolvency event in respect of itself, is declared insolvent by the court or in the course of being wound up or otherwise dissolved. A Participant shall notify CBOS immediately upon becoming aware of any Insolvency Event in respect of itself. A Participant shall not use the system upon and after becoming aware of the occurrence of any Insolvency Event in respect of itself.
- (b) The Participant commits a breach of these rules and related procedures that CBOS in its discretion considers to be a significant breach;
- (c) The Participant fails to comply with any of the conditions of membership;
- (d) CBOS considers that it is in the public interest to suspend / terminate SRAG participation of a specific Participant;
- (e) The Participant fails to settle agreed charges and penalties as set out by CBOS;
- (f) The Participant is engaging in or is about to engage in an unsafe or unsound practice which in the opinion of CBOS is likely to hinder the satisfactory functioning of the system.

(3) CBOS may not suspend a Participant without giving that institution an opportunity to be heard. Provided that CBOS may, if an immediate systemic risk is involved, suspend the participation without notice pending the final order.

25. Effect of suspension

[1] Suspension of a Participant immediately:

- (a) prevents queued settlement transactions involving the suspended Participant on any of the LOM queues from settling by effecting the removal from the queue;
- (b) prevents diarised settlement transactions involving the suspended Participant from settling by effecting the removal of these transactions; and
- (c) Prevents new transactions involving the Participant from being entered into the system.

26. Notification of Suspension



- (a) CBOS shall promptly notify a Participant of its suspension from participating in SRAG and the causes of this suspension.
- (b) The Participant will be notified by sending a communication to that effect electronically or by fax or a letter immediately.
- (c) The notice shall be deemed delivered as soon as the electronic message is released or the fax is transmitted or the letter delivered at the counter of the Participant.
- (d) The other Participants shall be advised about the suspension immediately.

27. Appeal of suspension

- (a) 9.1 A Participant who is suspended under the provisions of these Rules may appeal to CBOS.
- (b) 9.2 If a Participant who is suspended by CBOS appeals the suspension, CBOS shall give the Participant an opportunity, within five (5) business days after the effective date of the suspension, to make representation to CBOS.

28. Re-activation

- (a) 10.1 A Participant who has been suspended may at any time be re-activated by CBOS.
- (b) 10.2 CBOS shall notify other Participants about the re-activation of a suspended Participant as soon as possible by sending a communication to that effect.

29. Exclusion

CBOS has sole authority to determine the existence of cause sufficient to consider exclusion of an entity's designation as a Participant of SRAG.

30. Withdrawal

If the Participant qualifies in terms of the eligibility criteria to participate in the system and has been registered in the system, and has not for any reason been suspended or excluded from the system, such a Participant may not withdraw from SRAG unilaterally.

31. Restriction of participation by stopping payments and/or receipts

CBOS may restrict the right of a Participant to use SRAG or any feature thereof in the following circumstances:



- (a) Where CBOS determines that the Participant is unable to properly use SRAG or any feature thereof due to operational or technical problems with the Participant's own systems, or due to events over which the Participant has no control;
- (b) Where CBOS determines such action is necessary to protect the interests of the CBOS and is in the best interest of all other Participants;
- (c) A Participant can request CBOS to stop any receipts for a limited period, not exceeding one (1) business day, where due to temporary technical or other serious operational issue, they believe they are temporarily unable to fulfil their obligations under these Rules.
- (d) CBOS may remove the restriction when CBOS in its sole discretion determines that the Participant is able to resume normal operations.

32. Survival of Obligations

- (a) 14.1 The liabilities and obligations of a Participant to SRAG and to other Participants, and of RTGS and other Participants to the Participant shall survive the suspension or exclusion of the Participant as though the former Participant were still a Participant.
- (b) 14.2 In the event the Participant has been suspended or excluded from SRAG, all its pending payment messages shall be cancelled, however, the concerned Participant shall continue to have liability for effecting those payments to the concerned parties. The Participant shall also continue to remain liable for all its accrued and accruing obligations under these operating rules.



CHAPTER 7

Roles and Responsibilities

33. Settlement bank as paying bank

[1] Funding

- (a) It is the responsibility of each Participant to fund its own accounts for settlement.
- (b) It is the responsibility of each Participant to ensure that it has sufficient collateral lodged at the SFSC for account funding purposes.
- (c) It shall be the paying bank's responsibility to fund its net debit position on the clearing LOM as follows:
 - Before 09:30 for the National Switch; and
 - Before 15:00 for the ECC.
- (d) It shall be the paying bank's responsibility to fund its debit position on the General LOM.
- (e) Banks must manage their instructions on the General LOM. A bank can:
 - Remove queued instructions;
 - Reprioritise queued instructions;
 - Resequence queued instructions within a priority; and
 - Diarise an instruction to be triggered at the end of the value day.

[2] Responsibility for correct beneficiary details

- (a) It is the responsibility of the paying bank to include sufficient, correct and clear information to enable the beneficiary bank to identify the beneficiary customer unequivocally.
- (b) It shall be the paying bank's responsibility to provide the originator of the FSI (in cases where the paying bank is not the originator) with sufficient, correct and clear information to enable the beneficiary bank to identify the beneficiary customer unequivocally. The originator shall be responsible for transmitting correctly the details provided to it by the paying bank.

[3] Identification of beneficiary

The beneficiary bank shall identify the beneficiary customer of the funds based on account number and in the absence of an account number, by the name, address and any other identification details provided in the FSI.



[4] Receiver codes

- (a) Receiver codes shall be used to specify the payment instruction processing in specific way.
- (b) Participants are required to use the Receiver codes as published by CBOS from time to time.

[5] Same Day Value

- (a) The same day value payments are those which are expressed to be executed on the day of transmission of payment message.
- (b) Same-day value Payment Messages can only be entered during the exchange period of the Business Cycle that matches the value date of the transaction.

[6] Future Value

- (a) Future value payments are those which have a value date after the day of payment message transmission.
- (b) In SRAG the maximum number of days into the future that an FSI can be diarised is (14) fourteen calendar days.
- (c) Future value Payment Messages are not final until they are paid on their value date.

34. Settlement bank as beneficiary bank

1. FSIs with Correct Beneficiary Account Number

The Beneficiary bank upon receipt of FSI with a correct account number in the Beneficiary Customer account number field, must credit the Beneficiary customer with same-day value as soon as possible after receipt of notification of payment from SRAG, but not later than the end of the same FSVD.

2. Inability to Execute Payment

If the Beneficiary bank is unable to execute anFSI, it is the responsibility of the Beneficiary bank to contact the Originator for clarification.

3. Value to Correct Beneficiary

The Beneficiary bank shall ensure that the value of the payment is given to the correct Beneficiary as per the details in the relevant FSI.

4. Incorrect Account Number



In cases where the account number is not provided, or is not correct for the Beneficiary stated in the Beneficiary Customer account numberfield, the Beneficiarybank must endeavour to credit the Beneficiary customer's account as soon as possible but not later than 12.00 noon on the next business day. If the Beneficiary bank is unable to credit the Beneficiary by the afore-mentioned time, they must return the payment not later than end-of-day one business day after the value date stated in the FSI, without liability for use of funds compensation.

[1] Payments made in error

- (a) Payments in SRAG are final and irrevocable. In cases where a Paying Bank has made a payment in error to a Beneficiary Bank, it is the responsibility of the Paying Bank to notify the Beneficiary Bank of this.
- (b) The Beneficiary Bank must return the payment not later than end-of-day one business day after the value date stated in the FSI, without liability for use of funds compensation.
- (c) In terms of the applicable laws of the Sudan which may allow for the recovery of funds incorrectly or illegally paid, the proper application of the law is to seek a court order and then to have the court order to compel recipient to repay the funds.

[2] Return of Payments

When a Beneficiary bank is returning a payment to the Sending Participant, the following rules apply:

- (a) The message type must be a bank payment.
- (b) The original related reference number must be entered in the Related Reference field.
- (c) The Beneficiary related reference field must contain a reason for the return.



CHAPTER 8

Operating Schedule

35. Business days

- [1] CBOS specifies in SRAG which days of the week are business days (when interbank settlement takes place) and non-business days (when interbank settlement does not take place). Sundays to Thursdays shall be SRAG working days unless CBOS issues a circular to the contrary.
- [2] CBOS also defines calendar holidays in SRAG and these are also non-business days (when interbank settlement does not take place).
- [3] The date format in SRAG shall follow the Gregorian calendar.
- [4] Each new working day shall have its own value date in accordance to the Gregorian calendar.

36. Operating schedule

- [1] In SRAG the CBOS:
- (a) Maintains the standard operating schedule by specifying the sequence of the events (except for system control events that require a predetermined sequence) as well as the predetermined start time of each event;
 - (b) Maintains, if required, the actual operating schedule for the current or a future FSVD;
 - (c) Registers calendar holidays; and
 - (d) Defines each weekday as a business or non business day.
- [2] The administrator of SRAG can if necessary pause the system (trigger an ad-hoc pause or stop event) and resume it. All the Participants are informed about these events. All the payments submitted during the period during which SRAG is paused are queued outside of the system and processed once the system is resumed.
- [3] As per all master file changes, all Participants are informed about any change made to the holidays, weekdays, standard and actual operating schedules.
- [4] The following table contains the proposed standard operating schedule in SRAG, with the system processes that are performed during each event of the day:

Window	Event	Time	System processing
Open window	Open value day	08:00	• Activates all master file changes diarised for this value day



Window	Event	Time	System processing
	event		(FSVD); <ul style="list-style-type: none"> Removes all unacceptable collateral, i.e. financial instrument types that are not acceptable anymore and financial instruments (FIs) that have matured. FIs become unacceptable at the start of the FSVD in which their maturity date falls. Revalidates ALL diarised FSIs and IATIs, diarised for the current or a future FSVD; Any FSI or IATI that is not valid any more is discarded with the necessary notifications to the originator and/or paying bank. Uses the Standing intra-account transfer (IATI) arrangements to create IATIs accordingly for the current FSVD.
	Start value day event	08:15	<ul style="list-style-type: none"> Produces standard reports; Removes all MATURED and BLOCKED FIs from the banks' collateral lists; Market rates and haircuts are used to revalue FIs; Performs integrity test and produces system warnings and alerts as required; e.g. when a Participant has a status of Stop receive/pay.
Settlement window 1	Start window 1	08:15	
	RTM settlement trigger	08:15	<ul style="list-style-type: none"> This event starts the settlement of RTM FSIs. Newly received RTM FSIs as well as diarised FSIs are released for settlement on the RTM, provided that no other condition exists why the FSI cannot be released, e.g. the relative Participant has a status of Stop receive/pay etc.
	General LOM trigger	08:15	<ul style="list-style-type: none"> This event starts the settlement of the specified LOM FSIs. Newly received FSIs for the specified LOM as well as diarised FSIs are released for settlement on the specific LOM, provided that no other conditions exist why the FSI cannot be released.
	Clearing LOM trigger	08:15	<ul style="list-style-type: none"> As for the other LOM trigger events
Settlement window 2	Start window 2	11:30	
Settlement window 3	Start window 3	13:30	
	Pre-finalisation event	15:45	During this event the system forwards warnings as required, e.g.: <ul style="list-style-type: none"> When a bank is set as stop pay/receive; In respect of any potential permanent trades when a bank has sold FIs that become unacceptable from the next FSVD under intraday repo to CBOS; When FSIs are still diarised with the payer to activate option; or When any Charge FSI for the current FSVD has not settled successfully (the FSI is still diarised or it is discarded).
Finalise window	Finalisation event	15:45	<ul style="list-style-type: none"> The system performs the following during this event:



Window	Event	Time	System processing
			<ul style="list-style-type: none"> ○ FSIs that are diarised for a fixed time that is later than the start of the Finalisation event are automatically released; ○ The rest of the diarised FSIs, irrespective of the diarisation reason, are discarded by the system; ○ If a LOM cut-off event is not specified for a LOM, the cut-off defaults to the Finalisation event. ○ Surplus funds are transferred from each LOM to the RTM in order for the funds to be available for other LOM settlement. Surplus funds on a LOM include a LOM account balance, or part thereof, which the bank will not need any more for settlement on that LOM. ○ The system finalises all LOM FSIs where possible, applying the final gridlock resolution for each (as specified for the LOM cut-off event and by default using all RTM liquidity if required). ○ All LOM account balances are transferred to the settlement account. ○ All FSIs still queued on the LOM are discarded. ○ All RTM FSIs already released are settled and finalised.
Square-off window	Square-off event	15:45	<ul style="list-style-type: none"> ● Repurchases FIs sold under intraday repo to CBOS: <ul style="list-style-type: none"> ○ The system repurchases FIs, at the same price at which it was sold to CBOS, in the following sequence: <ul style="list-style-type: none"> ○ All FIs that are unacceptable from the next FSVD (this includes all FIs that mature during the next FSVD); ○ All FIs that move into the blocked period during the next FSVD; ○ In reverse order of the priorities on the collateral list. ● When any FI that is unacceptable as collateral from the next FSVD, is still sold under intraday repo, it becomes a permanent trade (stays the asset of the Central Bank (CBOS)) ● All outstanding repos become a permanent trade (FI sold stays the asset of CBOS). Permanent trade warnings are sent out to both CBOS and the settlement bank informing them about the permanent trade. ● Performs general housekeeping to ensure the integrity of the system. The trial balance is checked and the system ensures that all instructions for the current value day have been processed. ● Forwards a warning to the administrator if holidays need to be loaded ● Forwards a warning to the administrator when market rates have not been loaded for the next FSVD ● Forwards a warning to the administrator when any master file changes are still awaiting authorisation (in SRAGt_administrator); ● Produces standard reports for both the administrator and Participants according to their profiles.
End-of-day pause window		15:50	<ul style="list-style-type: none"> ● The start of this event is delayed when: <ul style="list-style-type: none"> ○ Calendar holidays need to be loaded ● The system goes into an ad-hoc pause when: <ul style="list-style-type: none"> ○ There are still master file changes (in



Window	Event	Time	System processing
			<p>SRAGt_administrator) awaiting authorisation.</p> <ul style="list-style-type: none"> ○ After the outstanding master file changes are authorised and/or discarded the system has to be resumed manually by the system administrator. ● During this event the system: <ul style="list-style-type: none"> ○ Determines the next vale date (FSVD) and derives the actual operating schedule for that FSVD. ○ Calculates charges and creates system generated FSIs for the next FSVD in order to recover charges.. ○ Charges paid by the settlement Participants, although charges are only recovered automatically from settlement banks ○ Separate FSIs are created for Processing, Penalty and Subscription charges ● Produces, according to the system parameters, the GL interface file for updating the GL electronically. ● When the GL interface file cannot be produced, an alert is forwarded to the system administrator. The system however continues and is not stopped. The system administrator has a facility (in the Administrator front-end application) to recreate the GL interface file, when required. ● Rolls over to the next FSVD. ● Forwards data for the Advanced Statistics Data Warehouse. ● Perform system reconciliation. ● Goes into a (system) Closed window during which the system is closed to both the system administrator and the settlement Participants, until the start of the Open value date event.
Closed window	End value date event	15:50	<ul style="list-style-type: none"> ● No interaction possible

The above times are an indication only and CBOS reserves the right to change the operating schedule at any time.



CHAPTER 9

Transactions

37. Payments and transfers

[1] The following types of payments and transfers can be made in SRAG:

- (a) Interbank payments;
- (b) Third party payments;
- (c) Intra-account transfers; and
- (d) Concurrent batches of interbank payments.

[2] The eligibility of a RTGS Participant to undertake all or a subset of the above transaction types will be governed by its RTGS membership type.

38. Interbank payments

[1] Credit transfers between two Participants (including CBOS operations) corresponding to high-value as specified by CBOS, or urgent payment instructions. The sending Participants issue individual credit transfers that can be of two types: the general bank transfer and the customer transfer.

[2] Each instruction shall include information that specifies the purpose of the transaction, i.e. the receiver code.

39. Third party payments

[1] Third party transfers will be executed by CBOS in its capacity as Authorised Settlement Agent in SRAG, in terms of a Settlement Agreement.

[2] Third party transfers can be of two types: a general bank transfer and a customer transfer.

40. Intra-account transfers

[1] Intra-account transfers can be executed by a Participant, or by CBOS in its capacity as Authorised Settlement Agent in SRAG, in terms of a settlement agreement.

[2] Intra-account transfers take place between a Participant's own accounts, i.e. its settlement account, General LOM account and Clearing LOM account.

41. Concurrent batches of interbank payments

[1] A concurrent batch of funds settlement instructions originates from a single source and is used for the settlement of clearing batches from the ASA,s system.



[2] Concurrent batches are settled on an “all or nothing basis”. This implies that a concurrent batch of funds settlement instructions is only settled when all the net payers in the batch have sufficient funds (to cover their net position in the batch) in their accounts.



CHAPTER 10

INTRADAY LIQUIDITY FACILITIES

42. General

dynamic intraday repurchase transactions will be used for credit extension purposes in the system.

43. Eligible securities

Banks are required by law to keep 50 per cent of their liquid asset requirement, as determined by the CBOS, in financial instruments. The financial instruments as specified by CBOS, that banks keep complying with this requirements are:

- (a) Government Musharaka Certificates (GMCs);
- (b) Government Investment Certificates (GICs - not currently in use);
- (c) Central Bank Ijara Certificates (CICs); and
- (d) Khartoum Refinery Certificates (KRCs).

44. Valuation

The market rate minus the haircut is used to determine the value that the central bank pays for the security.

CBOS will provide the daily market rates at which the GMCs that are reserved in SRAG will be valued.

45. Haircut

In order to provide for deviations in the market value of the GMCs that are sold under repo to the CBOS, a haircut of 2 per cent will be applied to the market value of the GMC.

46. Reservation of securities

- [1] It is the responsibility of the settlement bank to ensure that it has sufficient securities reserved for settlement purposes.
- [2] All of the GMCs earmarked at SFSC in order for a settlement bank to comply with the requirement for holding 50 per cent of their liquid asset requirement in eligible assets, will be reserved in SRAG for settlement purposes.
- [3] Taking cognisance of the above, CBOS reserves the right to impose minimum levels of securities to be held as collateral in SRAG.
- [4] Banks shall follow the Intraday Liquidity Facility Operational Procedures as provided by CBOS when reserving securities as collateral in SRAG.



47. Intraday repurchase transactions with CBOS

The financial instruments that are reserved for funds settlement purposes are utilised dynamically by SRAG when the bank does not have sufficient funds in its settlement account to effect settlement. One or more securities (FIs) are sold to the central bank under a general intraday repo agreement. Securities are either sold partially or in full, depending on the amount of credit required by the bank.

48. Buy-back of intraday repo with CBOS

The bank can repurchase the repo during the day provided it has the necessary funds available. The repo is repurchased at the same price at which it was bought by the central bank.

49. End-of-day processing

During end-of-day processing, the securities sold under repo agreement to the central bank are automatically repurchased by the banks, provided that the banks have the necessary funds.

50. Failure to buy back intraday repo with CBOS

When a bank cannot repurchase a security because it does not have the necessary funds, the repo is converted into a permanent trade. When a repo is converted in a permanent trade an instruction is sent to the Administrator to transfer ownership of the security to the central bank.



CHAPTER 11

LIQUIDITY OPTIMISATION

53. Liquidity optimisation mechanisms in SRAG

- [1] The liquidity optimising settlement mechanisms (LOMs) in SRAG provide facilities to settle non-urgent funds settlement instructions, that is funds settlement instructions that do not necessarily require immediate settlement, but for which settlement must take place when sufficient funds are available - but at least by a designated cut-off time.
- [2] When the funds settlement instruction is processed and the necessary funds are available, provided that no other FSIs are queued for the paying bank, it is settled immediately, finally and irrevocably. However, if it cannot be settled it is queued for settlement as and when sufficient funds become available.
- [3] Queued FSIs on a LOM are settled either individually by utilising the full liquidity required, as and when it is available, or the system periodically offsets two or more queued instructions and settles them concurrently thereby minimising the liquidity requirement.
- [4] Two distinct interventions are used for the settlement of queued FSIs: the liquidity optimiser (Impact intervention) for the individual settlement of queued funds settlement instructions and the Gridlock resolution intervention (gridlock buster) for inter alia offsetting queued and inter-dependant funds settlement instructions to settle them concurrently.

54. Gridlock resolution

Periodically, at specified intervals, a Gridlock resolution intervention is triggered to settle queued settlement instructions concurrently, by inter alia offsetting them against each other, thereby minimising the liquidity requirement amongst them.

55. Priorities

- [1] The originator submits each funds settlement instruction with an explicit priority, subject to optional priority rules specified by the central bank.
- [2] Queued instructions are settled on a FIFO basis on the Clearing LOM and on a FIFO bypass (next first-fit) basis on the General LOM, according to the priority and date and time the instruction was queued.
- [3] In SRAG, the following priorities are applicable:



Priority (up to 2 numeric digits (1 – 99))	Short name (12 characters)	Description
1	First	CBOS Payment
2	Second	Government Payment
3	Third	Securities Payment
4	Fourth	Express Payment
5	Fifth	General Payment
99	Default	Non-urgent payments

56. LOMs in SRAG

Two LOMs will be registered in SRAG in the Sudan:

- [1] Clearing LOM
- [2] General LOM

CBOS retains the right to add any LOMs at its own discretion.

[1] Clearing LOM

Participant banks who are also registered as settlement banks in SRAG, i.e. that are registered in SRAG as Participants in the Clearing LOM may participate in the Clearing LOM mechanism.

- (a) Banks shall not make payments on the Clearing LOM directly.
- (b) All ASA are allowed to transact on the Clearing LOM.
- (c) Banks shall, however, be responsible for funding their net debit positions on the Clearing LOM as per the times agreed between CBOS and the Participant banks.
- (d) As a general rule, only concurrent batches of payments may be settled on the Clearing LOM.
- (e) CBOS, however, may submit single instructions on the Clearing LOM for funding purposes.
- (f) At the Finalisation event, SRAG will automatically utilise any funds in a settlement bank's settlement account as well as the bank's credit facilities to settle the bank's debit position on the Clearing LOM.



- (g) Clearing LOM settlements will have the highest settlement priority in the system.
- (h) Instructions that cannot be funded with the available liquidity will be discarded by the system.
- (i) It shall be the paying bank's responsibility to fund its net debit position on the clearing LOM as specified by CBOS
- (j) CBOS shall send the concurrent batches of clearing obligations on the Clearing LOM, in its capacity as authorised settlement agent, as specified by CBOS.
- (k) CBOS has the right to manage the instructions that are queued on the Clearing LOM and can remove concurrent batches from the Clearing LOM queue.
- (l) CBOS, via SRAG, will send alerts to banks should instructions remain on the queue for longer than a period as determined by CBOS.

(2)General LOM

- (a) Participant banks who are also registered as settlement banks in SRAG, i.e. that are registered in SRAG as Participants in the General LOM may participate in the General LOM mechanism.
- (b) Banks may make payments on the General LOM.
- (c) Banks are also responsible for funding their positions on the General LOM.
- (d) Only single payments may be settled on the General LOM.
- (e) At the Finalisation event, SRAG will automatically utilise any funds in a settlement bank's settlement account as well as the bank's credit facilities to settle the bank's debit position on the General LOM.
- (f) Instructions that cannot be funded with the available liquidity will be discarded by the system.
- (g) It shall be the paying bank's responsibility to fund its debit position on the General LOM.
- (h) Banks must manage their instructions on the General LOM.
 - i. A bank can:
 - ii. Remove queued instructions;
 - iii. Reprioritise queued instructions;
 - iv. Resequence queued instructions within a priority; and
 - v. Diarise an instruction to be triggered at the end of the value day
- (i) CBOS, via SRAG, will send alerts to banks should instructions remain on the queue for longer than a period as determined by CBOS.



57. Finalisation event

Each LOM closes at the start of the *Finalisation* event. At this time the system tries one last time to settle all, or as many as possible, of the queued instructions per LOM concurrently, by utilising all available liquidity on the LOM and/or the RTM liquidity, including available credit facilities. RTM liquidity is used the system transfers per net payer of the queued LOM position, its net obligation required on the LOM, if available, else only the liquidity available. A Gridlock resolution intervention is then triggered immediately to settle as many as possible of the queued FSI by inter alia offsetting them against each other. All funds settlement instructions or concurrent batches of funds settlement instructions that are still queued after the final gridlock-busting intervention are automatically discarded. All the LOM account balances remaining in the LOM account after final settlement are automatically transferred to the banks' settlement accounts.

58. LOM queue management

Queued instructions can be removed, reprioritised, re-sequenced or diarised for later settlement.

[1] Single FSIs

- (a) Only the originator, or CBOS on his behalf, may remove a queued LOM FSI from the LOM.
- (b) Only the paying bank, or CBOS on his behalf, may reprioritise or resequence a queued LOM FSI.
- (c) Only the paying bank, or CBOS on his behalf, may diarise any queued single FSI for later settlement. It is diarised on the CRM with the payer to activate option and needs to be activated by the paying bank prior to the start of the Finalisation event for an RTM FSI or a LOM FSI.

[2] Concurrent batch of FSIs

- (a) Only the originator, or administrator on its behalf, may remove a queued concurrent batch of FSIs prior to settlement.
- (b) Only CBOS may reprioritise a batch of queued LOM FSIs.



CHAPTER 12

Dispute Resolution

59. Finality of Payment

Once the Settlement account of the sending Participant has been debited and the receiving Participant settlement account has been credited, the payment is deemed final.

60. Irrevocability of Transfer

[1] FSIs in SRAG are protected from the potential application of the “zero-hour rule”. Under this “rule”, a court-ordered liquidation is deemed to commence from the first moment of time on the day the court order was granted. The application of this rule could result in payments made by a failed institution between midnight and the time the court order was made being declared invalid. This would have undermined the irrevocable nature of SRAG payments and may have created severe liquidity, and potentially systemic, problems in the payment system.

[2] This section has effect despite any other law.

61. Limitation of CBOS liability

[1] Without limiting any other provision of these rules, CBOS will not be liable for any loss to any person howsoever arising whether direct or consequential (including but not limited to loss of profits) or damage to persons or property arising out of:

- (a) any act or any failure or inability to act by any person other than CBOS, its officers, employees or agents (including without limitations any errors, omissions or delays, any undertaking or representation, any breach of the rules or the terms of any other document relating to the System, any Insolvency Event, any failure to Settle any Transaction, any failure to transmit any instructions, information or document or any fraud or forgery;
- (b) any act or any failure or refusal to act (including without limitation any decision or calculation made) by CBOS, its officers, employees or agents in good faith;
- (c) the negligence, fraud, dishonesty, misconduct, unfamiliarity or omission of the Participant or its official or employee in the use of RTGS.
- (d) any delay caused due to breakdown, malfunctioning or deficiency of SRAG system including hardware, software, telecommunication and electrical systems (including without limitation failure of a RSA Token or any communications, computer, software or electrical failure);



- (e) any unauthorised access to, or participation in, the System by any person other than an officer, employee or agent of CBOS;
- (f) the suspension or closure of the System by CBOS in accordance with the rules; or
- (g) the adoption by any Participant (acting in any capacity) of these rules, or any other document relating to the System.

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

62. Fraud

- [1] Any loss arising due to fraud originated at the Participant's business shall be borne by the relevant Participant.
- [2] Central Bank is authorized to interrupt any transaction should Central Bank identify any suspicion of money laundering activities relating to a particular transaction.

63. Dispute Settlement

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

64. Charges and penalties

[1] Transaction Fees and Charges

The Participant shall pay the charges and penalties as defined by CBOS in SRAG, and which may be amended by CBOS at its own discretion, from time to time, as when deemed appropriate.

[2] Recovery of charges and penalties

- (a) In SRAG charges shall be recovered daily and the FSIs shall be created during the End value day event of each day to be recovered during the next funds settlement value day (FSVD).
- (b) Three single funds settlement instructions are created, per Participant, for the recovery of subscription fees, processing charges and exception charges respectively.



- (c) During the next FSVD these FSIs are recovered on the RTM and it is the responsibility of each Participant to ensure that there is sufficient liquidity available for settlement of these charges and penalties.
- (d) Should a Participant have insufficient funds for the recovery of charges and penalties and the SRAG-generated FSI fails, CBOS will recover the charges as an ASA. Over and above the normal charge or penalty, CBOS reserves the right to levy an additional discretionary charge on the defaulting Participant.

65. EMERGENCIES AND BUSINESS CONTINUITY

[1] Extending settlement windows

- (a) Should there be a need for Extension of SRAG settlement window or postpone an event, the Participants must log a Call with the SRAG Help Desk using the prescribed SRAG Help Desk Form.
- (b) CBOS has the sole discretion to approve or reject the extension request.
- (c) CBOS also has the right to levy a discretionary charge on a bank for this extension.

[2] Inability to meet clearing obligations

- (a) Participants are obliged to fund their net debt position on the Clearing LOM prior to time specified in these rules.
- (b) In the event any Participant cannot fulfil its clearing settlement obligations, it is the responsibility of the Participant to inform CBOS of this and make arrangements to ensure that the obligations can be met.
- (c) Participants that cause a clearing concurrent batch to fail may be liable to a penalty in SRAG.

[3] Business Continuity

CBOS will define the Business Continuity procedures and cases that warrant the invocation of these procedures and this will be communicated to all Participants.



CHAPTER 13

65. General

- [1] 65.Each Participant must have the appropriate technical capability, including adequate Business Continuity arrangements, so as not to hinder the smooth operation of the system(s).
- [2] Each Participant is responsible for its own connection to the VPN.
- [3] Each Participant must be capable of sending and receiving its payment messages within the Payments System during the hours of operation of the SRAG system.
- [4] Each Participant is liable for all charges which it incurs through the use of the system.
- [5] In the event of a prolonged technical problem a Participant must request that CBOS changes its status to Stop pay or Stop receive, depending in the situation. In such an event, CBOS will inform all other Participants, however it will be the responsibility of the Participant requesting the status change to implement the required Business Continuity procedures so that large value payments are still accomplished.

Issued under my hand on this dayth of November 2011.

Dr. Mohammed Khair Elzebiar

Governor of the Central Bank



Appendix A: list of participants

Central Bank Of Sudan as settlement bank
Central Bank of Sudan as Authorised Settlement Agent
Faisal Islamic Bank
Agricultural Bank Of Sudan
Bank Of Khartoum
El Nilein Bank
Savings And Social Development Bank
National Bank Of Abu Dhabi Khartoum
Islamic Co-Operative Development Bank
Sudanese French Bank
National Bank Of Sudan
Tadamon Islamic Bank
Sudanese Islamic Bank
BlueNile Mashreg Bank
Al Baraka Bank
Export Development Bank
Saudi Sudanese Bank
Workers National Bank
Animal Resources Bank
Sudanese Estates Bank
Farmers Commercial Bank
Animal Resources Bank
Omdurman National Bank
Financial Investment Bank
BanqueSahelo-Saharienne
Byblos Bank Africa Limited
Alsalam Bank
Sudanese Egyptian Bank
The Industrial Development Bank-Sudan
United Capital Bank
Elgazeera Sudanese Jordanian Bank
Family Bank
Qatar National Bank
Arabic Sudanese Bank



APPENDIX B: LIST OF PUBLIC HOLIDAYS

Date	Holiday
1 Jan	Independence Day
1 Moharram	Islamic New Year
12 Rabi ulAwal	Prophet's Birthday
28 Apr	Easter Day
30 Jun	Engath Celebration Day
27 Rajab	Israa and Meeraj Day
1 Shawwal (4 days)	Ramadan Eid
25 Dec	Christmas Day
9 Zilhaj (5 days)	Al-Adha Eid