Guidelines for Repurchasing Agreements with the Central Bank of the Bahamas

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1. Introduction

These Guidelines have been prepared for the Central Bank of The Bahamas (CBOB). It contains directives and recommended best practices for market participants who intend to use the Repo facility in The Bahamas.

Repos are governed by Global Master Repo Agreements (GMRAs) which have recently been agreed in The Bahamas. All directives contained in the GMRAs and the Guidelines are binding on eligible counterparties and serve as regulatory and operational guidance for Repo trading in The Bahamas. For this initial stage, The Bahamas GMRA solely relates to repos between the CBOB and eligible market participants. It explicitly does not cover third-party Repos (those between market participants).

These Guidelines will be administered by CBOB who may consult periodically with other regulatory bodies, government agencies and market participants on the continuing suitability of the Guidelines and GMRAs and make amendments to ensure they remain relevant and useful.

2. Definitions

Definitions are given in the GMRAs which are available at:

- https://www.centralbankbahamas.com/news/market-policies-and-rules-news/central-bank-of-the-bahamas-intraday-and-overnight-liquidity-facility-master-repurchase-agreement-between-central-bank-of-the-bahamas-and?N=N
- https://www.centralbankbahamas.com/news/market-policies-and-rules-news/central-bank-of-the-bahamas-cbob-liquidity-facility-long-term-master-repurchasing-agreement-between-central-bank-of-the-bahamas-and?N=N

3. Repos – description and how they are arranged

3.1 Description and operational processes

Repos are a form of standardised sell and buy-back transactions widely used in securities markets. In a Repo one party, the Repo Buyer, acquires securities from the Repo Seller and pays a consideration to the Seller – this is the first leg which initiates the Repo. The transaction involves a commitment to reverse the transaction at a fixed future date at prices agreed at the time of the first leg – this is the second leg. The price in the first leg – the Purchase Price and the Price in the second leg – the Repurchase Price - are agreed when the Repo is initiated.

The Repo Buyer is essentially lending money to the Repo Seller using the stock as collateral for the loan. So a Repo is a form of collateralised loan. The actual transfer of stock, as opposed to pledging collateral, simplifies the resolution in the case of a default especially in a market situation where there will be a large number of such transactions between participants since the lender always has ownership of the collateral until the second leg of the Repo. In the event of a default the non-defaulting party retains the asset (securities or cash) handed over by the defaulting party (unless some kind or rollover or similar arrangement is agreed.)

The Purchase Price of the security is the market price (with accrued interest included also called the "dirty price") according to some agreed benchmark but generally reduced by a

Haircut (which may be predefined or negotiated). The Haircut offers the lender a protection against market movements during the term of the Repo in the event of a default. The Repurchase Price is calculated as the Purchase Price plus a margin to cover interest for the period of the Repo (so there is no scope for capital gain in a Repo since the Repurchase Price is equal to the Purchase Price plus interest). The interest may be negotiated for each Repo or based on a benchmark rate.

Coupon payments during the term of the Repo will be paid to the Repo Buyer as the registered owner of the stock (during the period of the Repo). The Repo Buyer will make a transfer of the coupon amount to the Repo Seller.

If the market price of the Repo'd asset moves beyond an agreed threshold compared to the Repurchase Price, then one party or other may request payment of margin by the other party known as margin maintenance. The agreed threshold is the Minimum Margin Amount and is subject to contractual agreement between parties to the Repo. It can therefore be set at any level as agreed by the contractors. The level for The Bahamas is discussed in Section 10.

Default proceedings can be initiated by either party when one of a number of pre-defined events has occurred relating to failure to complete any of the transfers agreed in the contract or a more general failure involving one of the counterparties. In the event of a default by either party the counterparty will retain the asset which was transferred to them in the first leg (the Repo Buyer has the stock and Repo Seller has the money). So if the Repo Seller does not repay the loan by buying back the securities, then the Repo Buyer retains the stock. Because of the Haircut the Repurchase Price should be lower than the Market Value of the asset. In practice, at the time of the default there will likely be a number of Repo transactions involving the two parties. A valuation process assesses the total amount owed by each party to the other and a net payment is to be made.

To facilitate the transacting of Repos, the International Capital Market Association (ICMA) has devised and published a standardised contract for Repos – the Global Master Repurchase Agreement (GMRA). The GMRA is designed for short-term Repos of simple high-quality fixed-income securities. It has been widely adopted and is seen as the standard framework for Repos. The GMRA consists of a pre-printed master agreement that contains standard provisions, which are generic to the market in standard Repo and Annex I, a lists specific choices that need to be made by the parties to operationalize the agreement (e.g. fixing minimum delivery periods). It also provides somewhere to record supplemental terms and conditions, if the parties wish to customise the master agreement to reflect the special character of the business relationship between them. The specific commercial terms of each transaction are recorded in confirmations, a model template for which is provided in Annex II of the GMRA.

3.2 Purpose and types of Repos

Repos perform a number of functions:

1. Short-term finance to manage settlement imbalances (transactions in stocks are most often settled on a DvP basis[1] so there can be no imbalances but, for example, the buyer of stock may be awaiting monies from another transaction).

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[1] DvP means a settlement arrangement where the transfer of cash and securities is simultaneous. Model 1 (so called gross/gross is where transactions are settled individually (rather than, for example, bulking them up to settle net amounts).

2. Longer-term finance using assets as collateral. In particular, market participants may use Repos to leverage their capital by using long positions to secure finance for further trading activities.
3. Monetary control where a central bank will operate in the market to increase or reduce market liquidity by buying or selling stock through Repos. Here Repos play a similar role to open market operations.

Repos may be distinguished by type of counterparty:

- Central bank Repos where the central bank is the counterparty to market participants in all cases – for monetary control and to support financing needs of market participants.
- Third-party Repos where market participants are counterparties on both sides of the Repo – as lenders and borrowers. Depending upon the types of market participant this might be akin to the inter-bank market, or it might support the leveraging of capital by securities dealers.

By term:

- Very short-term intra-day Repos to add fluidity to the settlement process
- Overnight Repo which are the most common type of Repo in most markets
- Term Repos for longer-periods as negotiated between counterparties

By method of issuance:

- Auctions are used for central bank Repos intended for monetary control
- Direct negotiation for one-off central bank financing and for 3rd party Repo

4. Types of Repo in The Bahamas

All Repos will have CBOB as one counterparty and an eligible participant as the other counterparty. There is no provision for third-party Repos (meaning Repos between eligible participants other than the CBOB). All counterparts will be principals, there is no provision for agency Repos.

The CBOB has published two GMRAs based upon the ICMA template to provide the framework for the Repo market. The two GRMAs cover:

- Short-term – intraday and overnight Repos – these will in almost all cases be sales to CBOB.
- Long-term – 2 days and beyond – no maximum specified – these will be either sales to CBOB (Repos) or Sales by CBOB (Reverse Repos).
- Repos can also be free of payment (FOP). These are mainly used for arranging Repos between clients of the same depository participant. The Repo arranges for movements of securities between depository sub-accounts but the cash transfer is arranged internally by the depository participant without involving Real Time Gross Settlement (RTGS) transfers.

5. Initiation, Confirmation, sale, repurchase of Repo transactions

5.1 Initiation of Repos

Repos are negotiated contracts between counterparties one of which is the CBOB. Messaging will be through the BGSD System but the messages are essentially confirming an arrangement that has been negotiated by direct contact initiated by the eligible counterpart with the CBOB.

There is provision for partially automatic rollover of Intraday and Overnight Repos in the event that the eligible counterparty cannot complete the second leg. While the processing is automatic, each rollover requires specific CBOB Approval and authorisation. If CBOB decides not to approve the rollover then a Default Event is triggered – discussed in detail in Section 10.

Intra-day and overnight Repos will be initiated solely by a request from market participant to CBOB. The purpose of the Repo will be to redress short-term imbalances in settlement. CBOB will generally be the Repo Buyer (i.e. CBOB provides liquidity to the market). Specific approval will be required from the CBOB before the Repo can progress.

The Repo transaction will be considered to be executed when the securities have moved from the Seller account at the BGSD to the Buyer account at the BGSD and the buyer has simultaneously transferred the agreed payment of the Purchase Price. Failure to complete either of these on the due date will result in cancellation of the Repo contract. The BGSD system (which in this case will be the BGSD System described above) will send confirmations to both parties before the close of business on the transaction date.

The GMRA makes provision for rollover of intra-day and overnight Repo repurchase. If the Seller is unable to pay the Repurchase Price before the close of the business day on which it becomes due, then the contract is automatically rolled over to the next business day so that an intra-day Repo becomes an overnight Repo and an overnight Repo becomes a long-term Repo with Repurchase Date set to the next business day. Subsequent inability to pay the Repurchase Price will lead to further one-day rollovers. The maximum number of rollover days is a system parameter but CBOB can exercise its discretion to designate a default event before the maximum number of rollover days has elapsed. Rollover days will be charged at the CBOB Overnight Rate. The maximum number of permitted rollovers is set a global parameter at the discretion of the system administrator (CBOB) though there is no limit specified in the GMRA.

Long-term Repos will be initiated by:

- Request from market participant to CBOB. These requests will be for financing (liquidity provision by CBOB) and so the CBOB will be the Repo Buyer. Specific approval will be required from the CBOB before the Repo can progress.
- Acceptance by the CBOB of a bid in a Repo auction where the individual market participants (Party A) will be the sellers and CBOB the buyer – supply of liquidity to the market. Each Repo will entail a double approval process whereby the CBOB approves and authorises a Repo request. CBOB will need to institute appropriate levels of managerial authorities to ensure there is adequate scrutiny of Repo requests and appropriate management control.
- Acceptance by the CBOB of a bid in a reverse Repo auction where the individual market participants (Party A) will be the buyers and CBOB the seller – withdrawal of liquidity from the market.

The GMRA does not make provision in long-term Repos for rollover of Repos when the Buyer is unable to pay the Repurchase Price.

The BGSD system does not have the functionality to impose a penalty on a defaulter other than forfeiture of the assets (securities or cash) handed over by the defaulting party in the first leg of the Repo. For example, there is no provision to apply differential haircuts to historic defaulters or to apply a higher Repo rate. However, all Repos require acceptance by the CBOB and so the failure to complete the second leg of a Repo transaction is likely to mean that the

defaulter is excluded from future access to CBOB finance through the Repo market – see Section 10.

5.2 Repo auctions

From time-to-time CBOB may decide to conduct a Repo (where the CBOB buys securities from the market and injects liquidity) or reverse Repo auction (where the CBOB sells securities to the market and withdraws liquidity.) In both cases the CBOB will specify the securities that are being offered or which will be accepted by the CBOB). Auctions will be announced at least one day in advance and eligible participants will be invited to submit bids. The GMRA does not specify the types of auction so both Quantity-only Auctions (where the CBOB pre-specifies the Repo Rate and offers an amount for Repo – bidders will just specify the amount they wish to bid for) and Yield Auctions (where the Repo rate is not pre-set but is determined by the auction process – so bidders bid both a Repo Rate and a Repo amount). The auction module of the BGSD System will support both types.

The BGSD System will also support variations in pricing:

- Uniform pricing – Successful bidders all get same Repo Rate
- Multiple pricing – successful bidders get the Repo Rate they bid

There will also be options for dealing with over-subscription:

- Pro-rata – successful bids at same rate receive the same percentage of their bid amount.
- First come, first served – bids at the same rate are allocated stock with priority given to the earliest bids submitted.

The Reverse Repo Auctions will allow bidders to submit bids incorporating several different securities (ISINs).

There will be no facility for Non-Competitive Bidding.

CBOB maintains the right to reject certain bids or cancel the entire auction.

5.3 Execution of Repo – first and second legs

The Repo transaction will be considered to be executed when the securities have moved from the Seller account at the BGSD to the Buyer account at the BGSD and the buyer has simultaneously transferred the agreed payment of the Purchase Price. Failure to complete either of these on the due date will result in cancellation of the Repo contract. The BGSD system (which in this case will be the BGSD System described above) will send confirmations to both parties before the close of business on the transaction date.

On the Repurchase Date the securities or equivalent securities must be transferred from the Buyer's account at BGSD to the Seller's account at BGSD and the Repurchase Price, as agreed, must be transferred from the Seller to the Buyer. Equivalent securities are those which have, with the Repo Buyer's agreement, been substituted for the original securities specified in the Repo – Substitution is described in more detail in Section 8.

Cut-off times are at the discretion of CBOB. Current cut-off times in the BGSD System are:

1. Intraday auction cutoff – 3:00 p.m.
2. DvP cutoff – 4:00 p.m.
3. FoP cutoff – 4:45 p.m.
4. End of business day – 4:50 p.m.

5. End of day – 5:00 p.m.

Repo first legs not completed by the cut-off are automatically cancelled.

5.4 Repo Transactions Acceptance/Approvals

CBOB reserves the right to reject or deny any repo transaction submitted by a market participant at any time. As with all repo transactions, both parties must agree to engage in the contract.

6.Basics of Repos

6.1 Transacting and settlement infrastructure

Transacting will be arranged through SWIFT messaging supported by the BGSD System which supports the BGSD. Securities movements will be conducted using BGSD System which has Repo functionality. Cash transactions will be conducted through RTGS. Some cash transactions will be automatically generated by BGSD System. Other, such as coupon payments and margin maintenance payments will be initiated through BGSD System by participants.

6.2 Eligible Collateral Securities

All securities held in the BGSD are potentially eligible for Repo. The BGSD System will automatically prevent Repos of securities that mature during the Repo term.

6.3 Eligible Counterparties

CBOB will be the counterparty for all Repos. Other eligible participants will be entities with RTGS accounts and accounts at BGSD. Other entities, for example, clients of depository participants whose securities are held in sub-accounts, will participate through the depository participant.

6.4 Payments and Transfers

All cash and securities transferred under this agreement shall be transferred through the Delivery versus Payments process. (DvP is a securities settlement mechanism which links a securities transfer and a funds transfer in such a way as to ensure that delivery occurs if – and only if – the corresponding payment occurs).

Cash payments will be made through RTGS. Securities deliveries will be made in the BGSD. Movements of cash and securities will be directed by the BGSD System used by the BGSD.

BGSD has five daily cut-off times:

1. Intraday auction cut-off – 3:00 pm
2. DvP Cut-off – 4:00 pm
3. FoP Cut-off – 4:45 pm
4. End of business day – 4:50pm
5. End of day – 5:00 pm

6.5 Contractual Currency

All payments made in respect of Purchase Price, Repurchase Price, Coupons and Margins shall be made in Bahamian Dollars.

6.6 Minimum transaction size

Unless otherwise agreed by CBOB the minimum transaction size will be B$ 10,000 of nominal value.

6.7 Maximum Repo term

The maximum Repo term will be 365 days.

6.8 Reference price

Repos are priced using a reference price described below as Market Value. With an active secondary market the closing price on the previous day could be the reference price. But in the absence of a liquid secondary market, another reference price will be needed. The correct Purchase Price for a Repo includes accrued interest up to the date of the Repo (a so-called "dirty price"). The reference price for use in The Bahamas will depend upon the date of issue of the security being Repo'd:

- For securities issued from the start of 2024, a daily theoretical reference price is calculated. The calculation produces a reference price based upon the discounted present value of cash flows accruing to the security between the current data and the maturity date. The nature of the calculation will mean that reference prices calculated in this way include accrued interest up to the date of the Repo.
- CBOB currently publishes, in its Quarterly Digest of Statistics, a monthly price at which it will buy or sell securities. For securities issued before the start of 2024, the mid-price of the two-way price for the current month will be taken as basis for the reference price. However, these are clean prices (i.e. not including accrued interest). CBOB will calculate the accrued interest as part of the Repo process and adjust the reference price to give the Purchase Price.

This reference price will also be used in valuations of assets and liabilities associated with Default Events.

It should be noted that the reference prices are only intended as indicative (for example, circumstances, such as the policy rate, may have changed since the latest calculation of the reference prices). The Banking Department of CBOB will, if appropriate, suggest a more appropriate reference price.

7. Purchase and Repurchase Price

The Purchase Price is the price which the Repo Buyer will give to the Repo Seller in the first leg of the Repo transaction. Repos in The Bahamas will all have CBOB as one counterparty, either as the Repo Buyer or the Repo Seller. The Purchase Price is based upon the Market Value adjusted by a Haircut. The source of the Market Value is described above in section 6.9. The size of the Haircut is described in the next section on Margining. Its purpose and effect is to provide security for CBOB against adverse movements in the market price of the collateral.

Where CBOB is the Repo Buyer (CBOB is buying securities and lending money), CBOB needs to have protection against a default by the Repo Seller – i.e. Repo Seller is unable to pay the Repurchase Price. In the event of a default, the Repo Buyer (in this case CBOB) will retain the collateral stock. However, if this occurs then the Repo Buyer needs to be protected against a fall in the value of the collateral before the default. Therefore the money paid for the securities (the Repo Price) needs to be less than the current value of the securities so the Haircut is subtracted from the current Market Value to arrive at the Repo Price.

Where CBOB is the Repo Seller (CBOB is selling securities and receiving payment - in effect CBOB is borrowing money), CBOB needs to have protection against a default by the Repo Buyer – i.e. Repo buyer is unable to return the stock to CBOB (less likely than default by the Repo Seller but certainly feasible). In the event of a default, the Repo Seller (in this case CBOB) will retain the money paid as the Purchase price but the collateral stock will not be returned. If the collateral stock has increased in Market Value before the default, then the Purchase Price will not be enough to purchase the stock in the market. Therefore the money paid for the securities (the Repo Price) needs to be greater than the current Market Value so the Haircut is added to the current Market Value to arrive at the Repo Price.

Note that, in line with normal international practices, the Market Value used to calculate the Purchase Price includes accrued interest (i.e. that part of the regular coupon payment which has accrued since the last coupon payment). To calculate:

DP = CP +(1 + C*D/365)

Where:

DP = Dirty Price = Market value.

CP = Clean price – i.e. price excluding accrued interest (usual basis for quotation and trading).

C = Coupon rate expressed as a fraction representing a percentage (e.g. if Coupon is 7% then C =0.07).

D = Number of days since the last coupon payment excluding the coupon payment day but not including the current day.

7.1 Calculation of Repo Price

For Repos where CBOB is the Repo Buyer (i.e. CBOB is lending money against securities collateral) the Purchase Price will be less than the Market Value:

PP=MV * (1-H)

Where:

PP = Purchase Price.

MV = Market Value or market price (including accrued interest – "dirty price").

H = Haircut expressed as a fraction representing a percentage (e.g. if Haircut is 5% then H=0.05).

For Repos where CBOB is the Repo Seller (Reverse Repo i.e. CBOB is borrowing money using securities collateral) the Purchase Price will be greater than the Market Value:

PP=MV * (1+H)

Where:

PP = Purchase Price.

MV = Market Value or market price (including accrued interest – "dirty price").

H = Haircut expressed as a fraction representing a percentage (e.g. if Haircut is 5% then H=0.05).

7.2 Repurchase Price

The Repurchase Price is the Purchase Price plus an amount representing interest on the loan calculated at the Repo Rate).

RP=PP * [1 + (R*D/365)]

Where:

RP = Repurchase Price.

PP = Purchase Price.

R = Repo Rate is an annual interest rate expressed as a fraction representing a percentage (e.g. if the Repo Rate is 6% then R=0.06).

D = number of calendar days of Repo Term (for intra-day Repos the number of days is zero i.e. no Repo interest charge

The Repo rate will be decided by CBOB and notified to the market. It is a system parameter and therefore applies to all Repo transactions.

7.3 Repo Rate

The Repo rate will be expressed as an annual rate. The Repo rate will be notified in an official communication from CBOB. It is a system parameter and therefore applies to all Repo transactions. It will be used for all Repos initiated by market participants. Repo rates for Repos or reverse Repos arrived at through auctions may or may not be adopted by CBOB as the Repo Rate for future transactions.

8. Substitution

Subject to agreement with the Buyer, a Seller may substitute alternative securities during the term of the Repo. Transfer of the previous Purchased Securities back to the Repo Seller and transfer of the new Purchased Securities to the Repo Buyer will be arranged using BGSD System through the BGSD. The new Purchased Securities will then be deemed to be the Purchased Securities.

9 Treatment of coupon payments

Income payments can occur during the term of the Repo or in the period after the Repurchase Date but before Equivalent Securities have been delivered to the Repo Seller. In these circumstances, the registered owner of the securities will be the Repo Buyer and the coupon will be credited to the Repo Buyer's RTGS account.

The purpose of a Repo is to formalise a collateral arrangement rather than to transfer risk or ownership rights to the Repo Buyer. Thus the coupon payment belongs to the Repo Seller. The Repo Buyer therefore has an obligation to remit an amount equal to the coupon payment (sometimes known as "Manufactured Payments") to the Repo Seller on the date the payment is made by the issuer.

The amount paid to the Repo Seller should be equal to the amount the Repo Seller would have received had securities been held in the Repo Seller's account at Bahamas Government Securities Depository. Therefore if the Repo buyer has incurred any costs, taxes or other deductions from the coupon payment then these should be made good before payment to the Repo Seller so the Repo Seller receives the entire coupon payment.

These payments are not automated and must be made outside the BGSD System depository and settlement system. Payment, like other cash payments should be made through the RTGS system. Late payments of coupons will be subject to an interest charge as described below for other forms of late payment.

10. Risk management and default

10.1 Initial Margin or Haircut

The purpose of the Haircut was described in section 8. The Haircut protects against losses that the Repo buyer might incur consequent upon a default (failure to return cash or stock exchanged in the first leg of the Repo) during the term of the Repo. The level of Haircut forms a part of the Repo contract.

 In theory, the size of a Haircut should depend upon:

- The credit riskiness of the non-CBOB counterpart representing the likelihood of a default situation arising.
- The volatility of the Repo'd stock meaning the likelihood of and likely size of an adverse price movement.
- The quality of the collateral which depends on the liquidity of the market (transaction costs of trading out of an unwanted position).

In practice, in highly developed markets, Haircuts are often the subject of negotiation and may be zero. Also the data required to calculate a Haircut according to the factors described above often does not exist – as is the case in The Bahamas. A simple rule of thumb seems a good starting point and an across-the-board figure of 5% seems appropriate at this stage in the market's development.

CBOB will publish the levels of Haircut which will be the same for all eligible securities and will, as mentioned, initially be set at 5%. BGSD System will maintain the Haircut data and automatically apply the Haircut when a Repo is initialised.

Haircuts are also known as Initial Margins in some markets. In practice the two concepts are very similar and serve the same purpose though the calculation differs between the two concepts. The GMRA for The Bahamas speaks only of Haircuts so there seems little to be gained by further explanation of the Initial Margin concept.

10.2 Margin Maintenance

The Haircut is intended to give protection to the Repo Buyer against adverse price movements and is based on a measure of normal market movements. For more exceptional market movements a provision to protect both Buyer and Seller involves payment of extra margin. This is known as Additional Margin.

In practice, since all Repos will have CBOB as a counterpart and CBOB is a guaranteed entity it is unlikely that other market participants will feel the need to request Additional Margin from CBOB. However, CBOB, being mindful of the credit situation of market participants, is likely to request Additional Margin from its counterparts.

The operation of Additional Margins is as follows:

- If at any time the aggregate Market Value of all the Purchased Securities in which the party is a Repo Buyer is less than the aggregate Buyer's Margin Amount for all such transactions leading to Margin Deficit, the Repo Buyer may, by written notice, notify all

the counterpart Repo Sellers that margin is required to be paid (either in cash or Additional Securities equivalent to the Purchased Securities) by the Repo Sellers to the Repo Buyer to ensure that the value of margin cash and securities plus Repo'd securities equals or exceeds the aggregate Buyer's Margin Amount.

- If at any time the aggregate Market Value of all the Purchased Securities in which the party is a Repo Seller (having sold the Purchased Securities) is less than the aggregate Seller's Margin Amount for all such transactions leading to Margin Excess, the Repo Seller may, by written notice, notify all the counterpart Repo Buyers that margin is required to be paid (either in cash or Additional Securities equivalent to the Purchased Securities) by the Repo Sellers to the Repo Buyer to ensure that the value of margin cash and securities plus Repo'd securities equals or exceeds the aggregate Seller's Margin Amount.

Essentially this is saying that:

- For transactions in which the party is a Repo Buyer the threshold would be crossed when the aggregate value of Purchased Securities at current price (Current Market Value) falls below the aggregate value when the Repo was initiated = Purchase Price (= Market Value when Repo was initiated less Haircut less any subsequent Additional Margin payments).
- For transactions in which the party is a Repo Seller the threshold would be crossed when the aggregate value of Purchased Securities at current price (Current Market Value) exceeds the aggregate value when the Repo was initiated = Purchase Price (= Market Value when Repo was initiated plus Haircut plus any subsequent Additional Margin payments).

Additional Margins will not be calculated or managed by the BGSD System. Counterparties (including CBOB) will have to make their own calculations and request payments of Additional Margin. The arrangements by which and the thresholds at which notification to make margin payments are submitted to the counterpart are defined by negotiation between the counterparts. For example, counterparts may agree to only require Additional Margin payments when the Margin Deficit/Excess exceeds a specified amount. As one of the counterparts CBOB will wish to standardise the contract terms. The configuration of a relatively high Haircut and the fact that the CBOB will be the counterparty in all Repos suggests that the need for Additional Margin will be rare. Given that it is proposed that, at this early stage, there should be no threshold of tolerance and that the CBOB should request Additional Margins on all occasions on which it becomes due subject to a notional minimum to reduce the cost of multiple small payments in volatile markets – say B$100.

Transfers of securities will be made by depository transfers. Transfers of cash will be made through RTGS.

10.3 Default Events

Repo default event situations can be summarised as:

- Failure by one party to make timely payments, coupon payments or transfers of securities as specified in the Repo contract.
- Other events such as loss of license or more general insolvency of one of the principles.

More specifically the detailed provisions defining a Default Event of the two GMRAs are set out below:

i) Buyer fails to pay the Purchase Price upon the applicable Purchase Date or Seller fails to pay the Repurchase Price upon the applicable Repurchase Date.

ii) Seller fails to deliver Purchased Securities on the Purchase Date or Buyer fails to deliver Equivalent Securities on the Repurchase Date, in either case within the standard settlement time for delivery of the Securities concerned. For intra-day and overnight Repos, these will automatically be rolled over to the next day – so that will not be a Default Event.

iii) Seller or Buyer fails to comply with the requirements related to payment of coupons.

iv) an Act of Insolvency occurs with respect to Seller or Buyer[2].

v) any representations made by Seller or Buyer are incorrect or untrue in any material respect when made or repeated or deemed to have been made or repeated.

vi) Seller or Buyer admits to the other that it is unable to, or intends not to, perform any of its obligations hereunder or in respect of any Transaction.

vii) Seller or Buyer being declared in default or being suspended or expelled from membership of or participation in any securities exchange or suspended or prohibited from dealing in securities by any Competent Authority in each case on the grounds that it has failed to meet any requirements relating to financial resources or credit rating.

viii) Seller or Buyer fails to perform any other of its obligations hereunder and does not remedy such failure within 30 days after notice is given by the Non-Defaulting Party requiring it to do so.

ix) Authority in each case on the grounds that it has failed to meet any requirements relating to financial resources or credit rating.

x) Seller or Buyer fails to perform any other of its obligations hereunder and does not remedy such failure within 30 days after notice is given by the Non-Defaulting Party requiring it to do so.

10.4 Automatic rollover

In the case of short-term Repos the GMRA makes provision for automatic rollover (extension) of the Repo term. Therefore failure to deliver on the second leg of an intra-day Repo or overnight Repo would not be treated as a Default Event:

For intraday Repos, failure to pay the Repurchase Price by the cut-off time will cause BGSD System to automatically convert the transaction into an overnight Repo. The Repurchase Price will be adjusted to allow for the extra interest using CBOB's Repo Rate:

$$NRP = RP * [1 + (O*D/365)]$$

Where:

NRP = New (adjusted) Repurchase Price.

RP = Original Repurchase Price.

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[2] An Act of Insolvency is defined in Section 2. Interpretations of the GMRAs.

O = CBOB Repo rate expressed as a fraction representing a percentage (e.g. if the Repo Rate is 6% then R=0.06).

R = Repo Rate is an annual interest rate expressed as a fraction representing a percentage (e.g. if the Repo Rate is 6% then R=0.06).

D = number of calendar days by which the transaction has been extended. In these situations D=1 in both cases as just one day added.

For overnight Repos, failure to pay the Repurchase Price by the cut-off time will cause BGSD System to automatically convert the transaction into a long-term Repo for settlement the next business day. The Repurchase Price will be adjusted to allow for the extra interest using CBOB's Repo Rate:

$$NRP = RP * [1 + (O*D/365)]$$

Where:

NRP = New (adjusted) Repurchase Price.

RP = Original Repurchase Price.

O = CBOB Repo rate expressed as a fraction representing a percentage (e.g. if the Repo Rate is 6% then R=0.06).

R = Repo Rate is an annual interest rate expressed as a fraction representing a percentage (e.g. if the Repo Rate is 6% then R=0.06).

D = number of calendar days by which the transaction has been extended (in the case of an intra-day Repo D=1).

Failure to settle the NRP on the next day (day3) leads to an extension for a further day and this can be repeated in subsequent days at the discretion of CBOB.

The BGSD system allows automatic rollovers to the next day up to a maximum number. The maximum number is a system parameter set by CBOB. At any time before the maximum number of rollovers the CBOB has the right to cancel the Repo transaction. And implement the default procedures as described below.

10.5 Resolution of defaults

In such an event the parties retain ownership of the asset in their possession:

i)   The Seller will not pay the Repurchase Price to the Buyer and will have no further obligations to the Buyer.

ii)   The Buyer will remain in possession of the Purchased Securities (including any Additional Purchased Securities) and will have no further obligations to the Seller.

The BGSD System will cancel the Repo transaction if there is no delivery of one or other asset at the cut-off time on the Repo settlement date. The settlement of transactions operates on a Delivery versus Payment principle meaning that cash and securities essentially change hands at the same time. Securities movements are accomplished in the BGSD System and cash movements through RTGS. It is therefore not possible, in the second leg of the Repo, for the Repo Buyer to receive settlement of cash and retain the Repo'd securities, nor is it possible for the Repo Seller to receive the Repo'd securities and not pay the cash.

Beyond this, in a Default Event, the non-defaulting party may give written notification to the defaulting party giving details of the default. The non-defaulting party also has the option to terminate just the Repo affected by the default or all (but not some) outstanding transactions with the counterparty and this will also form part of the notification to the defaulting party. As all Repos will be with CBOB as a counterparty then Default Events in The Bahamas context will involve CBOB as the non-defaulting party.

Note that intra-day and overnight Repos will be extended as described above so failure to deliver will not be classed as a Default Event. Note also that the CBOB has no other recourse other and a) not returning the collateral and b) terminating all Repo contracts with the defaulting counterparty as described under Set-off below. The CBOB may, at its discretion, restrict future access of the defaulting party to the Repo facility. This would be the most important penalty for defaulting on a Repo transaction since it would restrict the defaulter's access to future CBOB finance. There is no provision in the BGSD system to impose a higher Repo Rate or a higher Haircut on some participants and not others.

11. Set-off

This is a more general default situation which applies where the non-defaulting party has opted to close-out all outstanding transactions (if the non-defaulting party has opted to close only the Repo in which the Default Event occurred then the resolution is achieved by each party retaining the Repo'd assets, cash or stock, that they hold).

Where the non-defaulting party has opted to terminate all outstanding transactions with the defaulting counterparty then a more complex process of acceleration, recalculation and set-off or netting occurs.

11.1 Acceleration by notice

If a Default Event occurs and is deemed likely to continue, the non-defaulting party may notify the defaulting party in writing that it intends to accelerate the settlement date for the second leg of all (must be all, not some) outstanding Repos with the defaulting counterparty. The date of the notification is deemed to be the new Repurchase Date.

11.2 Calculation of balances

- **Default Market Value** – is the Market Value on the new Repurchase Date following the methodology described for deciding the Market Value of the Repo' d stock. In the case of The Bahamas this will be the theoretical value calculated within the BGSD System for securities issued after the start of 2024 and the benchmark value calculated by CBOB and published in the Quarterly Digest of Statistics on the Bank's website with adjustment for Accrued Interest (see Section 6.1) if that is not included in the benchmark value.
- **Amount to be stated** – an account of what is due from each party to the other will be calculated as at the new Repurchase Date. Securities and equivalent securities will be valued at the Default Market Value. The new Repurchase Price will be valued by recalculating the interest premium included in the original Repurchase Price - by discounting the original Repurchase Price to the new Repurchase Date. The sums will be set-off or netted to arrive at net liability after allowing for any Additional Margins that have been paid. The resulting balance will become due on the new Repurchase date. (all amounts must be in Bahamian Dollars on the new Repurchase Date at the Default Spot Rate).

- **Interest** – shall be payable on net balances from the new Repurchase date up to the date of actual settlement (including the new Repurchase Date but excluding the date of payment and calculated at the Default Rate).
- **Set off of other amounts** – any party due to make a payment as described may opt to offset the net amount by deducting any amounts owed but relating to other transactions. Interest payable will be adjusted to allow for the offsets of other amounts.

12. Interest on overdue payments

Interest on overdue payments (e.g. coupon payments) will be payable at the Repo Rate for the transaction or at the prevailing Overnight Rate of CBOB as contractually agreed between the counterparties.

Appendix - Accounting for Repo

This appendix illustrates the accounting treatment of a Repo transaction. In this example Bank A is the Repo Buyer and Bank B is the Repo Seller. The Repo amount is B$10 mn, the term is 1 year and the Repo rate is 10% p.a. The tables below show the balance sheet changes (for simplicity Haircuts are assumed to be 0%).

Balance Sheet before Repo			
Bank A		**Bank B**	
Assets	**Asset value B$ mn**	**Assets**	**Asset value B$ mn**
BRS	100	BRS	10
Cash	10	Cash	100
TOTAL	110	TOTAL	110
Liabilities	**Liability value B$ mn**	**Liabilities**	**Liability value B$ mn**
Capital	50	Capital	50
Borrowings	60	Borrowings	60
TOTAL equity and liabs.	110	TOTAL equity and liabs.	110

Bank A now arranges a Repo under which it sells B$10 mn of BRS to Bank B with an agreement to repurchase the securities at a defined future date. Bank B transfers cash of B$10 mn to Bank A.

Balance Sheet after Repo first leg			
Bank A		**Bank B**	
Assets	**Asset value B$ mn**	**Assets**	**Asset value B$ mn**
BRS	100	BRS	10
		Loan to Bank A	10
Cash	20	Cash	90
TOTAL	120	TOTAL	110
Liabilities	**Liability value B$ mn**	**Liabilities**	**Liability value B$ mn**
Capital	50	Capital	50
Loan from Bank B	10		
Borrowings	60	Borrowings	60
TOTAL equity and liabs.	120	TOTAL equity and liabs.	110

The key point is that because the risk and reward associated with owning BRS has not passed from Bank A to Bank B (since the Repo price is guaranteed and all coupons received will be passed from Bank B to Bank A) the BRS remains on the balance sheet of Bank A. So the only impact of the Repo is a cash loan of $B 10 mn from Bank B to Bank A.

Coupon payments will pass to Bank A through Bank B so the treatment of coupons will be unchanged by the Repo.

Balance Sheet after Repo second leg			
Bank A		**Bank B**	
Assets	**Asset value B$ mn**	**Assets**	**Asset value B$ mn**
BRS	100	BRS	10
Cash	9	Cash	101
TOTAL	109	TOTAL	111
Liabilities	**Liability value B$ mn**	**Liabilities**	**Liability value B$ mn**
Capital	50	Capital	50
Retained earnings	-1	Retained earnings	1
Borrowings	60	Borrowings	60
TOTAL equity and liabs.	109	TOTAL equity and liabs.	111

The cash position of Bank A falls by the amount of the repaid loan (B$ 10 mn) and the interest on the loan (B$ 1 mn). Correspondingly the cash position of Bank B rises by the amount of the repaid loan (B$ 10 mn) and the interest on the loan (B$ 1 mn).

The loan interest represents a cost to Bank A and so is reflected in retained earnings as – B" 1 mn. Correspondingly the interest represents earnings to Bank b and is reflected as + B$ 1 mn in retained earnings.