Appendix A – Bilateral Settlement Details and Processes for Category A1 Collateral in MEPS+

1   Repo – Obtaining SGD funds using SGS, MAS Bills and/or MAS FRN ("Category A1 Securities")

1.1   To obtain SGD funds using Category A1 Securities, the Eligible Counterparty shall enter into a Repo with the Authority. The Repo shall comprise the following transactions:

(a)   opening leg – a transaction where the Eligible Counterparty sells Category A1 Securities to the Authority (the "**Sale**") and receives the SGD Principal from the Authority on the Value Date; and

(b)   closing leg – a transaction where, on the Maturity Date, the Eligible Counterparty repurchases from the Authority the Category A1 Securities which were transferred to the Authority pursuant to the Sale by paying the Closing Leg Settlement Amount to the Authority.

1.2   For a Repo involving Category A1 Securities, the Value Date of the opening leg of such Repo falls on the Trade Date.

1.3   For the purpose of the Sale referred to in Paragraph 1.1(a), the amount of SGD Principal that the Authority will transfer to the Eligible Counterparty shall be computed based on the amount of Category A1 Securities transferred by the Eligible Counterparty to the Authority (the "**Nominal Amount**"), as follows:

- $SGD\ Principal\ (rounded\ to\ 2\ decimal\ places)$

  $= Effective\ Price\ of\ Category\ A1\ securities\ \times$

  $\left(\dfrac{Nominal\ Amount\ of\ the\ SGS\ Bonds\ \textbf{OR}\ SGS\ T\text{-}Bills\ \textbf{OR}\ MAS\ Bills\ \textbf{OR}\ MAS\ FRN}{100}\right)$

1.4 The Effective Price of the Category A1 Securities on the Trade Date shall be defined as follows:

(a) <u>Repos involving SGS bonds[1]</u>

- $Effective\ price\ of\ the\ SGS\ bonds\ (rounded\ to\ 2\ decimal\ places)$
  $= Initial\ dirty\ price\ (rounded\ to\ 2\ decimal\ places)\ \times (1 - \frac{Haircut}{100})$

  where the Haircut for the SGS bonds is set out in a MASNET circular or in notices transmitted via any other written communication modes stipulated in Clause 24 of the Agreement.

- $Initial\ dirty\ price\ (rounded\ to\ 2\ decimal\ places) = P + AI$

where

P is the closing clean price of the SGS bonds one (1) Business Day prior to the Trade Date as published on the Authority's website[2]; and

AI is the accrued interest per S$100 face value, and shall be calculated as at the Value Date of the Repo as follows,

$$AI = \left(\frac{coupon\ rate\ in\ \%}{2}\right) \times \left(\frac{N}{E}\right)$$

where

N is the number of calendar days between the first day of the current coupon period of the SGS bonds (inclusive) and the Value Date (exclusive); and

E is the number of calendar days in the current coupon period of the SGS bonds where the Value Date occurs; and

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[1] For avoidance of doubt, SGS bonds include both SGS (Market Development) and SGS (Infrastructure). The formula is for bonds with normal interest period of 6 months during the cum-interest period. For other formulae (e.g. ex-dividend period), please refer to Appendix I of the <u>Rules and Market Practices of the Singapore Government Securities Market.</u>

[2] For SGS bonds, refer to <u>https://www.mas.gov.sg/bonds-and-bills/SGS-Bond-Statistics</u>

(b)   Repos involving Treasury Bills and Cash Management Treasury Bills (collectively, SGS T-bills) or MAS Bills

- $Effective\ price\ of\ SGS\ T-bills\ or\ MAS\ Bills\ (rounded\ to\ 3\ decimal\ places)$
$= Initial\ clean\ price\ (rounded\ to\ 3\ decimal\ places) \times (1 - \frac{Haircut}{100})$

   where the Haircuts for the SGS T-bills and MAS Bills are set out in a MASNET circular or in notices transmitted via any other written communication modes stipulated in Clause 24 of the Agreement.

- $Initial\ clean\ price\ (rounded\ to\ 3\ decimal\ places)$
$= 100 - (Y \times \frac{N}{365} (rounded\ to\ 10\ decimal\ places))$

   where

   N is the number of calendar days from the Value Date (inclusive) to the maturity date of the SGS T-bills or MAS Bills (whichever is applicable) (exclusive); and

   Y is the closing yield of the SGS T-bills or MAS Bills (whichever is applicable) one (1) Business Day prior to the Trade Date as published on the Authority's website[3]; and

(c)   Repos involving MAS FRN

- $Effective\ price\ of\ the\ MAS\ FRN\ (rounded\ to\ 2\ decimal\ places)$
$= Initial\ dirty\ price\ (rounded\ to\ 2\ decimal\ places) \times \left(1 - \frac{Haircut}{100}\right)$

   where the Haircut for the MAS FRN is set out in a MASNET circular or in notices transmitted via any other written communication modes stipulated in Clause 24 of the Agreement.

- $Initial\ dirty\ price\ (rounded\ to\ 2\ decimal\ places) = P + AI$

   where

   P is the closing clean price of the MAS FRN one (1) Business Day prior to the Trade Date as published on the Authority's website[4]; and

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[3] For MAS Bills, refer to https://www.mas.gov.sg/bonds-and-bills/MAS-Bill-Statistics. For SGS T-bills, refer to https://www.mas.gov.sg/bonds-and-bills/treasury-bills-statistics.

[4] For MAS FRN, refer to https://eservices.mas.gov.sg/statistics/frn/FRNBenchmarkIssuePrices.aspx

AI is the accrued interest per S$100 face value, and shall be calculated as at the Value Date of the Repo as follows:

$$AI = Coupon\ Rate\ in\ \% \times \frac{N}{E}$$

where

N is the number of calendar days between (i)(A) the issue date of the MAS FRN (if no coupon has been issued) or (B) the first day of the current coupon period of the MAS FRN (if a coupon has been previously issued) (inclusive), and (ii) the Value Date (exclusive); and

E is determined as follows–

i.   if N falls between the issue date and the second interest payment date, E is the number of calendar days between the issue date (inclusive) and the second interest payment date (exclusive) of the MAS FRN; or

ii. if N falls between the X interest payment date and X+2 interest payment date of the MAS FRN, E is the number of calendar days between the X interest payment date (inclusive) and the X+2 interest payment date (exclusive), where X is any even positive integer;

AI should be floored at zero (0) if the computed value is negative.

$$Coupon\ Rate\ in\ \%$$
$$= Compounded\ SORA\ in\ \%\ (rounded\ to\ 4\ decimal\ places)$$
$$\ +Cut\text{-}off\ Spread\ in\ \%$$

where

Cut-off Spread (%) is the Cut-off Spread published for the respective MAS FRN Auction[5], expressed in percentage terms;

$$Compounded\ SORA\ in\ \%\ (rounded\ to\ 4\ decimal\ places)$$

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[5] For MAS FRN, refer to https://eservices.mas.gov.sg/statistics/frn/FRNAuctions.aspx

$$= \left(\frac{End\ SORA\ Index}{Start\ SORA\ Index} - 1 \right) \times \left(\frac{365}{End\ SORA\ Date - Start\ SORA\ Date} \right) \times 100$$

where

End SORA Date is two (2) Business Days (based on "SORA Publication Date") prior to the Value Date;

SORA Publication Date is the SORA Publication Date set out in the Singapore Overnight Rate Average (SORA) Table, as can be found on the MAS website[6];

End SORA Index is the SORA Index on the End SORA Date;

SORA Index is the SORA Index set out in the Singapore Overnight Rate Average (SORA) Table, as can be found on the MAS website[7];

Start SORA Date is two (2) Business Days (based on "SORA Publication Date") prior to the issue date of the MAS FRN (if no coupon has been issued) or the first day of the current coupon period of the MAS FRN (if a coupon has been previously issued);

Start SORA Index is the SORA Index on the Start SORA Date;

1.5   While a combination of different issues of Category A1 Securities can be used for Repos to obtain SGD funds, the Category A1 Securities that are proposed to be used by the Eligible Counterparty from each issue shall have a nominal value of at least S$5 million.

1.6   Any coupon payments paid to the Authority arising from the SGS bonds and MAS FRN in a Repo will be handled in accordance with the terms of the GMRA entered into between the Authority and the Eligible Counterparty, unless otherwise agreed in writing between the Authority and the Eligible Counterparty.

1.7   No interest shall be payable by the Authority for any Category A1 Securities transferred to the Authority to serve as collateral in relation to any Repo to obtain SGD funds under the Agreement.

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[6] https://eservices.mas.gov.sg/Statistics/dir/DomesticInterestRates.aspx

[7] https://eservices.mas.gov.sg/Statistics/dir/DomesticInterestRates.aspx

1.8   Eligible Counterparties should refer to the Authority's website[8] for the prices or yields (whichever applicable) of the applicable Category A1 Securities before submitting a request during the Operating Window.

2   Processing and Settlement of Transactions

2.1   On the Trade Date –

(a)   Where the Eligible Counterparty is a MEPS+ participant, it shall send the following confirmations and instructions for the SGD Principal to be transferred to the Eligible Counterparty from the Authority and the Nominal Amount of Category A1 Securities to be transferred from the Eligible Counterparty to the Authority:

i.   a Repo confirmation by facsimile/email[9] to the Authority; and

ii.   a SWIFT MT543 Delivery Against Payment instruction to MASGSGSM; and

(b)   Where the Eligible Counterparty is a non-MEPS+ participant, it shall –

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[8] For SGS bonds, refer to https://www.mas.gov.sg/bonds-and-bills/SGS-Bond-Statistics. For SGS T-bills, refer to https://www.mas.gov.sg/bonds-and-bills/treasury-bills-statistics.   For   MAS   Bills,   refer   to https://www.mas.gov.sg/bonds-and-bills/MAS-Bill-Statistics.   For   MAS   FRN,   refer   to https://eservices.mas.gov.sg/statistics/frn/FRNBenchmarkIssuePrices.aspx.

[9] Refer to Clause 22.2 of the Agreement for the facsimile number and email address.

i. send to FD a confirmation by SWIFT MT320 to MASGSGSG (for a SWIFT member) or by facsimile/email[10] (for a non-SWIFT member) for the SGD Principal to be transferred to the Eligible Counterparty from the Authority;

ii. send to FD a Repo confirmation by facsimile/email[11] for the Nominal Amount of Category A1 Securities to be transferred from the Eligible Counterparty to the Authority; and

iii. if it requires the Authority to transfer the Category A1 Securities on its behalf, free-of-payment from its SGS-Reserve Account with the Authority, to the Authority's SGS-Trade Account, instruct FD via SWIFT MT199 (for a SWIFT member) or by way of a letter that is signed by the authorised signatories of the Eligible Counterparty (for a non-SWIFT member) ("**Instruction Letter**").

2.2 The cut-off time for the Eligible Counterparty to send the aforementioned instructions, confirmations, Repo confirmations, SWIFT MT199 and Instruction Letter to FD is 4.15pm on the Trade Date. Failure to send the correct instructions, confirmations, Repo confirmations, SWIFT MT199 or Instruction Letter prior to the cut-off time may result in cancellation of the Repos by the Authority.

2.3 After sending the instructions, confirmations and Repo confirmations to FD as described in Paragraph 2.1 on the Trade Date –

(a) Where the Eligible Counterparty is a MEPS+ participant, it shall ensure that the Nominal Amount of Category A1 Securities are transferred from the Eligible Counterparty's SGS-Trade Account with the Authority, to the Authority's SGS-Trade Account based on the SWIFT MT543 Delivery Against Payment instruction to MASGSGSM.

(b) Where the Eligible Counterparty is a non-MEPS+ participant, it shall ensure that the Nominal Amount of Category A1 Securities have been transferred free-of-payment –

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[10] Refer to Clause 22.2 of the Agreement for the facsimile number and email address.

[11] Refer to Clause 22.2 of the Agreement for the facsimile number and email address.

i.   from the Eligible Counterparty's SGS-Reserve Account to the Authority's SGS-Trade Account based on the SWIFT MT199 or Instruction Letter to FD; or

ii.   from the Eligible Counterparty's agent bank's SGS Account to the Authority's SGS-Trade Account free-of-payment, via SWIFT MT542 to MASGSGSM. The Eligible Counterparty shall also provide details of its agent bank to the Authority in the SSI(s) and the Repo confirmations exchanged with the Authority.

2.4   In the event that the Authority does not receive the Nominal Amount of Category A1 Securities by 6.00pm on the Trade Date, the Eligible Counterparty shall be deemed not to have entered into the Repo, and the Repo shall be deemed to have been terminated. The Eligible Counterparty shall also pay a fee to the Authority for the failed Repo as stipulated in Clause 10.2 of the Agreement.

2.5   After FD has confirmed the successful receipt of the Nominal Amount of Category A1 Securities –

(a)   if the Eligible Counterparty is a MEPS+ participant, the SGD Principal shall be transferred to the Eligible Counterparty's RTGS Account via SWIFT MT543 Delivery Against Payment instruction to MASGSGSM; and

(b)   if the Eligible Counterparty is a non-MEPS+ participant, the Authority shall transfer the SGD Principal to the Eligible Counterparty's Current Account with the Authority. For fund transfer out of its Current Account, the non-MEPS+ participant should refer to Clause 5 of Terms and Conditions Governing the Operation of the Current Account of the Specified Institution.

2.6   On the Maturity Date –

(a)   The Eligible Counterparty shall have the Closing Leg Settlement Amount available in its RTGS Account (if it is a MEPS+ participant) or Current Account (if it is a non-MEPS+ participant) by 12.00pm for settlement of the closing leg of the Repo.

(b)   If the Eligible Counterparty is a MEPS+ participant, the Closing Leg Settlement Amount will be automatically debited from the Eligible Counterparty's RTGS Account, and the Nominal Amount of Category A1 Securities transferred to the Authority pursuant to the Sale will be automatically transferred from the Authority's SGS-Trade Account to the Eligible Counterparty's SGS-Trade Account.

(c)   If the Eligible Counterparty is a non-MEPS+ participant, the Closing Leg Settlement Amount will be automatically debited from the Eligible Counterparty's Current Account. Upon FD's verification that the Closing Leg Settlement Amount has been successfully debited from the Eligible Counterparty's Current Account, the Authority shall return, free-of-payment, the Nominal Amount of Category A1 Securities transferred to the Authority pursuant to the Sale to:

   i.   the Eligible Counterparty's SGS-Reserve Account; or

   ii.   the SGS Account of the Eligible Counterparty's agent bank, in accordance with the pre-established SSI, where the Eligible Counterparty had instructed its agent bank to transfer the Category A1 Securities from the agent bank's SGS Account to MAS' SGS-Trade Account.

(d)   In the event of a late repayment of the Closing Leg Settlement Amount, the Eligible Counterparty shall pay a fee to the Authority as stipulated in Clause 10.4 of the Agreement.