Appendix A – Operational Procedures and Additional Guidance for Depositing SGD Funds (Automated)

1 Operational Processes for Depositing SGD Funds

- 1.1 The Operating Window for depositing SGD funds on an overnight and unsecured basis with the Authority is from 6.00pm to 6.45pm on each Business Day.
- 1.2 Eligible Counterparties shall initiate such a trade during the Operating Window by sending a **SWIFT MT320**¹ to the Authority (MAS SWIFT BIC: MASGSGSG).
- 1.3 The SWIFT MT320 shall follow the message sequence as detailed in paragraph 4 of this Appendix. For the trade to be identified by MEPS+ as a SGD deposit transaction at the SF, Eligible Counterparties must ensure that the SWIFT MT320:
 - (a) contains a mandatory unique identifier "/SPRO/SFDEPO" in field 72; and
 - (b) denominates both the principal amount being deposited by the Eligible Counterparty and the interest amount payable by MAS to the Eligible Counterparty as "SGD" (i.e. "SGD" in field 32B & "NSGD" in field 34E respectively).

If any of these details are incorrect, the trade will be treated as a non-SF transaction and will not be processed. No acknowledgement or notification message will be sent out by MAS for such incorrect SWIFT MT320 sent. The trade will eventually be cancelled by the close of the MEPS+ operating hours.

1.4 An Eligible Counterparty may place multiple deposits. However, every such deposit shall have a minimum size of at least S\$10 million and should be initiated via a new SWIFT MT320, as set out in this Appendix.

2 Validation of Transactions

2.1 Upon the identification of the SWIFT MT320 as a SF deposit transaction, MEPS+ will proceed to validate the other trade details set out in the SWIFT MT320.

2.2 MEPS+ will calculate the interest amount based on the Deposit Rate and the number of calendar days the principal amount is deposited with the Authority. If the interest amount specified in field 34E of the Eligible Counterparty's SWIFT MT320 differs from the MEPS+ calculated amount, the amount to be paid upon

¹ Except in a contingency procedure, Eligible Counterparties are not required to notify the Authority via MDD's official dealing lines (refer to Clause 18.3 of the Agreement) to initiate such transactions.

maturity will be based on the interest amount calculated by MEPS+ in accordance with the formula below:

- Settlement amount in the second leg (to 2 decimal places) = [(Amount deposited) * (SF Deposit Rate/100) * (No. of calendar days amount was deposited/365) (to 10 decimal places)] + (Amount deposited).
- 2.3 Trades that fail the validation will be rejected. Counterparties should note that:
 - (a) A SWIFT MT398 message will be sent to the Eligible Counterparty with the processing status and error code for the rejection reflected in field 79 (example appended below). Eligible Counterparties should refer to paragraph 5 of this Appendix for a set of commonly encountered errors² and corresponding error codes to identify the error; and



(b) For a trade to pass the validation stage, "NEWT" has to be filled in field 22A of a SWIFT MT320, and the correct details as required in paragraphs 4 and 5 of this Appendix and the MEPS+ User Manual have to be sent to the Authority within the Operating Window. MEPS+ will reject all SWIFT MT320 sent with "AMND" (amend) or "CANC" (cancel) in field 22A.

3 Settlement of Transactions

- 3.1 Trades that pass the validation stage will be accepted and settled through the Eligible Counterparty's RTGS Account subject to the Eligible Counterparty having sufficient funds:
 - (a) A SWIFT MT398 will be sent to the Eligible Counterparty with the status "PASS" in field 79.
 - (b) Upon successful settlement of the trade, a SWIFT MT900 message will be sent to inform the Eligible Counterparty that the funds have been debited from its RTGS Account.

² Please refer to the MEPS+ User Manual for CAS, Chapter H, for the complete set of error codes if the common error code list in Appendix A does not contain the error code(s) which you have encountered. If there are any discrepancies in error codes, the list in the MEPS+ User Manual shall prevail.

- 3.2 Settlement of SGD will be through the Eligible Counterparty's RTGS Account. If the Eligible Counterparty has insufficient funds in its RTGS Account, transactions will be queued by MEPS+ until sufficient funds are credited into the Eligible Counterparty's RTGS Account. If there is still insufficient funds by the end of MEPS+ operating hours, the trade will be cancelled by MEPS+.
- 3.3 Eligible Counterparties must ensure they receive a SWIFT MT398 and a SWIFT MT900 to confirm that trades have been validated and settled respectively. In the absence of a SWIFT MT398 and a SWIFT MT900 from MEPS+, typically within 5 minutes, Eligible Counterparties should contact the Authority via the official dealing lines³ immediately. Trade requests sent after the close of the Operating Window, based on MEPS+ system time, will be rejected.

³ Refer to Clause 18.3 of the Agreement

4 SWIFT MT320 Message Format for Automated Deposit Trades (Fields are mandatory unless stated otherwise)

No.	SWIFT Field Tag/Name	Usage Description	Usage Requirements	Example
Head	ers Information	1		
1	Block 1: Sender	Sending member	 8-character BIC format. Must be an Eligible Counterparty, who is a MEPS+ participant. 	OCBCSGSG
2	Block 2: Receiver	Receiving member	Must be MAS SWIFT BIC.	MASGSGSG
3	Block 2: Message Type	Consists of 3 digits which define the MT number of the message being input.	Must be MT320.	320
4	Block 3 field 103: Service Identifier	FIN Copy service identifier	Must be empty.	
Mano		e A – General Inf	ormation	
5	15A: New Sequence			:15A:
6	20: Sender's Reference	Sender's unique reference number	Each MT320 sent by the same sender on the same Value Date must have unique reference number.	:20:REF-SAMPLE123
7	22A: Type of Operation	Specifies the function of the message.	Code 'NEWT' must be used when sending a transaction.	:22A:NEWT
8	22B: Type of Event	Specifies the event in the life of the loan/deposit.	Code 'CONF' must be used to indicate this is the first confirmation of a loan/deposit.	:22B:CONF

	1	1	,		
9	22C: Common Reference	A reference common to both the Sender and the Receiver.	 This field is not required in MEPS+ but is mandatory in SWIFT. MEPS+ will not validate this field. Below are the validation rules defined by SWIFT. (Party Prefix 1)(Party Suffix 1)(Reference Code)(Party Prefix 2)(Party Suffix 2) This field consists of two codes, a Sender's code and a Receiver's code, separated by a four-digit number. The codes are made up from the party prefix and party suffix of the Sender's and Receiver's BICs, that is, their BIC without the country code. The four-digit number must consist of the rightmost non-zero digit of field 37G in sequence B, preceded by the three digits to the left of it. If there are no digits to the left of it, the space must be zero filled. The four digits must be '0000' if field 37G in sequence B has a value of zero. 	:22C:OCBCSG0015MA SGSG	
10	82A: Party A		 Only option A is accepted. This must contain the 8-character BIC of the Eligible Counterparty that initiated the deposit transaction. 	:82A:OCBCSGSG	
11	87A: Party B		 Only option A is accepted. This must contain the 8-character MAS SWIFT BIC. 	:87A:MASGSGSG	
	End of Mandatory Sequence A – General Information				
	latory Sequenc	e B – Transactio	n Details		
12	Sequence	0		:15B:	
13	17R: Party A's Role	Specifies whether Party A is the borrower or the lender.	Must be 'L' to indicate that Party A is the lender (i.e. Party A pays the principal amount and receives the interest).	:17R:L	

14	30T:Trade Date	The Business Day on which a Financial Institution enters into a transaction to place SGD funds at the Authority on an overnight basis via the SF.	 Must be in YYYYMMDD format. Date must be equal to current Value Date. 	:30T:20161108
15	30V: Value Date	Intended Value Date of the deposit transaction.	 Must be in YYYYMMDD format. Date must be equal to current Value Date. 	:30V:20161108
16	30P: Maturity Date	The Business Day on which the second leg settlement amount, as calculated in accordance with paragraph 2.2 of Appendix A, is paid.	 Must be in YYYYMMDD format. Date must be equal to one Business Day after the Value Date. 	:30P:20161109
17	32B: Currency and Principal Amount	Currency and principal amount. This will be the amount on which the interest specified in field 34E is calculated.	 Currency must be specified as SGD. The principal amount will be the settlement amount in the first leg of the deposit transaction. This will also be the amount on which the interest is calculated. 	:32B:SGD10000000, Or :32B:SGD10000000,00
18	30X: Next Interest Due Date	The date the next interest is due	 Must be in YYYYMMDD format Date must be equal to maturity date 	30X:20161109
19	34E: Currency and Interest Amount	Currency and the first interest amount	 Currency must be specified as SGD. As the interest amount has to be received by Party A, amount is negative and sign must be present. MEPS+ will not validate the interest amount in the message. Instead MEPS+ will use the SF Deposit Rate set in MEPS+ to compute the interest amount. 	:34E:NSGD123,45

Negative interest rate will be rejected by MEPS+. Negative interest rate will be rejected by MEPS+. Interest rate should reflect the Deposit Rate of the SF. MEPS+ will reject SWIFT MT320s with wrong interest rate format, i.e. more than 3 integers and 5 decimal places, e.g. 9999,9999 or 111.111111. MEPS+ will not reject a MT320 with incorrect interest rate (albeit specified in the format as set out in this cell). Instead MEPS+ will use the SF Deposit Rate to compute the interest amount. The number of days which are taken into account for the calculation of the interest. MEPS+ will not validate the day count fraction provided. Instead MEPS+ will use the formula set by the Authority to compute the interest amount, i.e. ACT/365. End of Mandatory Sequence B – Transaction Details Mandatory Sequence C Settlement Instructions for Amounts Payable by Party A 22 15C: New Sequence Financial institution and account where Party B will 23 15C: STA:MASGSGSG This must contain the 8-character MAS 24 15C: STA:MASGSGSG This must contain the 8-character MAS 25 15C: STA:MASGSGSG This must contain the 8-character MAS 26 15C: STA:MASGSGSG This must contain the 8-character MAS 27 15C: STA:MASGSGSG This must contain the 8-character MAS 28 15C: STA:MASGSGSG This must contain the 8-character MAS 29 15C: STA:MASGSGSG This must contain the 8-character MAS 20 15C: STA:MASGSGSG This must contain the 8-character MAS 20 15C: STA:MASGSGSG This must contain the 8-character MAS 20 15C: STA:MASGSGSG This must contain the 8-character MAS 20 15C: STA:MASGSGSG This must contain the 8-character MAS 21 15C: STA:MASGSGSG This must contain the 8-character MAS 22 15C: STA:MASGSGSG This must contain the 8-character MAS 23 15C: STA:MASGSGSG This must contain the 8-character MAS 24 15C: STA:MASGSGSG This must contain the 8-character MAS 25 15C: STA:MASGSGSG This must contain the 8-character MAS 26 15C: STA:MASG				Negative interest rate will be rejected by	
21 Count Fraction 14D: Day Count Edken into account for the calculation of the interest. 14D: ACT/365 14D: AC	20		Interest Rate	 MEPS+. Interest rate should reflect the Deposit Rate of the SF. MEPS+ will reject SWIFT MT320s with wrong interest rate format, i.e. more than 3 integers and 5 decimal places, e.g. 9999,99999 or 111.111111. MEPS+ will not reject a MT320 with incorrect interest rate (albeit specified in the format as set out in this cell). Instead MEPS+ will use the SF Deposit Rate to 	:37G:0,15000 :37G:,15 The above examples represent the same
Mandatory Sequence C Settlement Instructions for Amounts Payable by Party A 22	21	Count	days which are taken into account for the calculation of	fraction provided. Instead MEPS+ will use the formula set by the Authority to compute the interest amount, i.e.	14D:ACT/365
22 15C: New Sequence :15C: 57A: Financial institution and account where Party B will • Only option A is accepted. 15C: :15C: :57A:MASGSGSG :57A:MASGSGSG :15TA:MASGSGSG :	End o	of Mandatory Se	equence B – Trar	nsaction Details	
Sequence :15C: 57A: Receiving Agent Party B will	Mand		e C Settlement In	structions for Amounts Payable by Party A	
57A: Receiving Agent institution and account where Party B will only option A is accepted. This must contain the 8-character MAS :57A:MASGSGSG This must contain the 8-character MAS	22				:15C:
receive the payment.	23	-	institution and account where Party B will receive the	This must contain the 8-character MAS	:57A:MASGSGSG
End of Mandatory Sequence C Settlement Instructions for Amounts Payable by Party A					
Mandatory Sequence D Settlement Instructions for Amounts Payable by Party B					
24 15D: New :15D:	24				:15D:
Identifies the Financial 57A: Only option A is accepted. S7A: MEPS+ will not validate the value in this	25	57A: Receiving Agent	Financial		:57A:MASGSGSG Or :57A:OCBCSGSG
Agent Party A will field. receive the Or :57A:OCBCSGSG	End o	of Mandatory Se	equence D Settle	ment Instructions for Amounts Payable by Pa	arty B
Agent Party A will field. receive the Or :57A:OCBCSGSG	Sequ		nal Information ⁴		
Agent Party A will field. receive the payment. Cr :57A:OCBCSGSG End of Mandatory Sequence D Settlement Instructions for Amounts Payable by Party B Sequence H Additional Information ⁴	26	15H: New Sequence			:15H:

⁴ Eligible Counterparties must include field 72 in SWIFT MT320 for automated deposit trades on the SF. Failure to do so will result in the trade not being processed by the Authority.

27	72: Sender to Receiver Information	Identifies that the SWIFT message is for the purposes of the automated SF deposit trades.	 SF identifier "/SPRO/SFDEPO" must be included to identify the trade as an automated SF trade. Characters should not be inserted into, or deleted from, the SF identifier. Characters may be inserted before or after the SF identifier. Non-SF trades (e.g. MMO trades) should not include the SF identifier in this field. Otherwise, non-SF trades will be treated as SF trades and be rejected or subjected to SF interest rates and terms & conditions. 	:72:/SPRO/SFDEPO
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5 Validation Errors for Automated Deposit Trades

No.	Error Message	CAS Return Code⁵
1	Sender status is not active.	ERR007
2	Field 22A: Type of Operation is not "NEWT".	ERR018
3	Field 22B: Type of Event is not "CONF".	ERR019
4	Field 82A: Party A is not a recognised MEPS+ participant.	ERR020
5	Field 87A: Party B is not the Authority. 8-character MAS SWIFT BIC of the Authority (i.e. MASGSGSG) must be used.	ERR021
6	Field 17R: Party A's Role is not Lender.	ERR022
7	Field 37G: Interest Rate is of invalid format and range. MEPS+ will only support up to 8-digits with a maximum of 3 integers and 5 decimal places i.e. 999.99999.	ERR024
8	Field 37G: Interest Rate must not be negative.	ERR025
9	Block 1: Sender must be the same as Party A.	ERR026
10	Field 57A: Receiving Agent must be the Authority. 8–character MAS SWIFT BIC (i.e. MASGSGSG) must be used.	ERR027

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⁵ A list of commonly encountered errors is listed. If you encounter any other error code, please refer to the MEPS+ User Manual for CAS, Chapter H, for the complete list of error codes. If there are any discrepancies between this list and the MEPS+ User Manual, the list in the MEPS+ User Manual shall prevail.

No.	Error Message	CAS Return Code⁵
11	Automated SF is not enabled.	ERR028
12	SF window is not open yet.	ERR029
13	SF window has ended.	ERR030
14	Field 30T: Trade Date invalid (i.e. must be current date).	ERR031
15	Field 30V: Value Date invalid for SF deposit (i.e. must be current date).	ERR032
16	Field 30P: Maturity Date falls on a non-Business Day.	ERR033
17	Field 32B: Deposit amount does not meet the minimum amount required for SF deposit transaction	ERR034
18	Deposit amount does not meet the minimum increment for SF deposit transaction.	ERR035
19	SF tenor period is invalid.	ERR036
20	Duplicated SF deposit transaction	ERR037