NEW MAS ELECTRONIC PAYMENT AND BOOK-ENTRY SYSTEM SERVICE AGREEMENT FOR THE PROVISION OF A REAL-TIME GROSS SETTLEMENT SYSTEM

THIS AGREEMENT is entered into between:

` '	("Pa	articipant	") having	its	registered	or	principal	place	of l	ousiness	at
(b)											
	and										
	prin	cipal plac	e of busines	s at	10 Shenton	Way,	MAS Bui	lding, S	Singap	ore 0791	17;
	Mo	netary Au	thority of S	Singa	apore Act (C	Cap.	186) (" M A	AS Act	") and	l having	its
(a)	the	Monetary	Authority	of S	Singapore, a	boc	ly corpora	te estal	olished	l under	the

WHEREAS BY THIS AGREEMENT, in consideration of the Participant meeting the access criteria determined by the Service Provider and paying the fees and charges provided in this Agreement, the Service Provider agrees to provide to the Participant the services relating to a Real-Time Gross Settlement System known as the New MAS Electronic Payment and Book-Entry System.

WHEREAS PURSUANT TO THIS AGREEMENT, the Service Provider and the Participant hereby further agree as follows:

1. DEFINITIONS AND INTERPRETATION

1.1 In this Agreement, unless the subject or context otherwise requires, the following words and expressions shall have the following meanings respectively ascribed to them:

"access criteria" means the criteria determined by the Service Provider and set out in Appendix 3, which a person must meet in order to become or remain as a Participant of MEPS+;

"Agreement" shall include any appendix and schedule to this Agreement;

"Appendix" means the appendix to this Agreement;

"business day" means any day from Monday to Friday except a public or bank holiday in Singapore;

"calendar month" means a month according to the Gregorian calendar;

"CBCA" means the central bank contingency automation solution developed by CLS Bank International to provide a standardized and automated platform for payment message exchange in contingency situations for the CLS system;

"CLS Bank International" means the institution of the same name which is approved by MAS pursuant to section 29A of the MAS Act and having its registered or principal place of business at 32 Old Slip, 23rd floor, New York, New York, 10005, United States of America;

"CLS system" means the system for settling payment obligations and entitlements arising from foreign exchange and other transactions, operated by CLS Bank International;

"fees and charges" means the fees and charges set out in Appendix 2, including such fees and charges as may be revised by the Service Provider from time to time by amendment to Appendix 2 in accordance with this Agreement;

"GST" means the applicable goods and services tax which may from time to time be imposed or charged before, on or after the date hereof by the Comptroller of Goods and Services Tax or other relevant Government authority under the Goods and Services Tax Act (Chapter 117A) (including any subsequent revisions thereto and regulations made thereunder);

"MAS" means the Monetary Authority of Singapore, a body corporate established under the Monetary Authority of Singapore Act (Cap. 186);

"MEPS+" means the New MAS Electronic Payment and Book-Entry System and has the same meaning as set out in the Payment and Settlement Systems (Finality and Netting) (Designated System) Order 2012;

"MEPS+ Services" means the services in relation to MEPS+ provided by the Service Provider in accordance with this Agreement;

"non-recoverable amount" shall have the meaning as ascribed thereto in Clause 11.6(a);

"Notice of Amendment" shall have the meaning as ascribed thereto in Clause 10.1;

"physical electronic storage media" means any hardware or device approved by the Service Provider to store electronic or digital information, and includes hard drives, discs and cards:

"Rules" means the operating rules determined by the Service Provider in relation to MEPS+ (the current form of which is set out in Appendix 1 to this Agreement) and any appendix and schedule to the Rules, each as amended from time to time pursuant to and in accordance with this Agreement;

"Service Provider" means the operator of MEPS+;

"SWIFT" means the Society for Worldwide Interbank Financial Telecommunication SCRL, a society established and registered in Belgium that has set up an international value-added transport network for the provision of SWIFT Messaging Services;

"SWIFT Messaging Services" means the messaging services provided by SWIFT to support access by the Participant to MEPS+ Services.

"SWIFT User Handbooks" means the user handbooks issued by SWIFT as may be revised by SWIFT from time to time.

- 1.2 Unless the subject or context otherwise requires, terms used in this Agreement which are not specifically defined herein shall have the meaning ascribed to the same in the Rules.
- 1.3 The headings are for convenience only and shall not affect the interpretation of this Agreement.

2. DURATION OF THIS AGREEMENT

This Agreement shall take effect on and from such date as may be specified by the Service Provider by giving not less than 7 days' prior written notice and shall continue in force until terminated in accordance with the terms of this Agreement.

3. PAYMENT OF FEES AND CHARGES

- 3.1 The Participant shall pay to the Service Provider the fees and charges as long as this Agreement continues in force.
- 3.2 The fees and charges payable under this Agreement shall be paid in the manner set out in Appendix 2.
- 3.3 In the event that any fee or charge remains unpaid after becoming due in accordance with Appendix 2, the Service Provider shall be entitled to charge interest at the rate of 10% per annum or at the prevailing 3-month Singapore Interbank Offer Rate (SIBOR) on the overdue amount, whichever is higher, subject to a minimum interest charge of SGD50.
- 3.4 The fees and charges payable under this Agreement are exclusive of GST, and the Participant shall bear and pay to the Service Provider all GST on or calculated by reference to the fees and charges payable under this Agreement and any fees and charges payable for other goods or services which the Service Provider may be required to supply under this Agreement. The Participant shall pay all such GST, in the manner set out in Appendix 2.

3.5 Notwithstanding the termination of this Agreement or the suspension of the use of the MEPS+ Services, no refund (either in whole or in part) shall be made of any fees and charges paid by the Participant under this Agreement.

4. RULES TO BE READ AS PART OF THIS AGREEMENT

- 4.1 The Participant hereby agrees that the Rules, as may be amended by the Service Provider from time to time in accordance with Clause 10 of this Agreement, shall be read as part of this Agreement and shall be binding on the Participant, and between the Participant and the Service Provider and all other participants in MEPS+. The Participant shall comply strictly with the Rules as long as this Agreement continues in force.
- 4.2 In the event of inconsistency between the Rules and this Agreement, the provisions of this Agreement shall prevail as between all the parties referred to in Clause 4.1.

5. USE OF MEPS+ SERVICES ONLY FOR PROPER PURPOSES

The Participant shall ensure that MEPS+ Services are not used for any unauthorised, illegal or unlawful purpose.

6. LIASION OFFICERS

- 6.1 The Participant shall appoint and maintain at all times, the appointment of two senior officials of the Participant or its third party service provider, who shall act as its liaison officer and alternate liaison officer, with whom the Service Provider may communicate at any time on any matter connected with the operation or the provisions of MEPS+ Services.
- 6.2 The Participant shall furnish in writing to the Service Provider the postal address, email address and facsimile number to which notices and correspondence from the Service Provider under this Agreement or the Rules may be sent to reach each liaison officer, and shall inform the Service Provider immediately in writing in the event that any liaison officer or alternate liaison officer ceases to hold the office or is replaced by another

officer, or if there is any change in the aforesaid postal address, email address or facsimile numbers.

7. TERMINATION WITHOUT DEFAULT BY NOTICE IN WRITING

7.1 Termination by the Participant

The Participant may terminate this Agreement by giving the Service Provider at least 30 days' notice in writing (except as otherwise provided in Clause 10.2), and MEPS+ Services shall be terminated on the date stated in such notice of termination.

7.2 Termination by the Service Provider

The Service Provider may terminate this Agreement by giving the Participant at least 60 days' notice in writing, or immediately in accordance with Clause 8 or 9 of this Agreement.

7.3 Consequences of termination

Where this Agreement is terminated, whether by the Participant or the Service Provider, the Participant shall continue to be liable for the fees and charges incurred up to the date of the termination.

8. IMMEDIATE SUSPENSION OR TERMINATION OF MEPS+ SERVICES

- 8.1 The Service Provider reserves the right to immediately suspend any or all of the MEPS+ Services temporarily or indefinitely, or immediately terminate this Agreement on the grounds of:
 - (a) national interest;
 - (b) public interest;
 - (c) public security; or
 - (d) public safety.

Where the Service Provider decides to exercise this right, it shall notify the Participant affected by the suspension or termination, all other participants and where applicable,

the Clearing House, of the suspension or termination if it is in the opinion of the Service Provider, reasonably practicable to do so.

- 8.2 In the event that any or all of the MEPS+ Services are suspended in any calendar month in accordance with Clause 8.1, or is suspended or interrupted due to technical fault or failure, or due to circumstances outside the control of the Service Provider, such as acts of God, war, acts of terrorism, riot, sabotage, natural disaster, industrial action or criminal activity, the Participant shall continue to pay the fees and charges in accordance with this Agreement, provided that where such suspension or interruption occurs for more than 7 days in that calendar month (whether such 7 days are continuous or discrete), the Participant shall be liable to pay any fee or charge for that calendar month that is not message-based, time-based or usage-based, on a pro-rated basis according to the number of days in that calendar month that the MEPS+ Services are not suspended or interrupted, and any fee or charge paid in excess of the pro-rated fee or charge shall be refunded to the Participant.
- 8.3 For the purpose of computing the pro-rated fee or charge in Clause 8.2, a suspension or interruption is deemed to have occurred on any day, and any pro-rated fee or charge calculable shall discount such fee or charge payable for any day, only where the suspension or interruption is for more than 2 continuous hours during the normal operating hours of MEPS+ on that day.

9. DEFAULT BY THE PARTICIPANT

- 9.1 Without prejudice to any other right or remedy that the Service Provider has or is entitled to, and notwithstanding the non-acceptance or waiver of action by the Service Provider of any previous breach on the part of the Participant, whether or not any such breach amounts to a repudiatory breach, the Service Provider may immediately (i) suspend the provision of any or all of the MEPS+ Services to the Participant, either for a time or indefinitely (and if for a time, for such time as the Service Provider may, at its sole discretion, determine), or (ii) terminate this Agreement, if the Participant:
 - (a) defaults in paying any fee or charge or other sum due under this Agreement;

- (b) is being or has been wound up or has a receiver or receiver and manager appointed;
- (c) enters into or has had an application made to enter into a compromise or arrangement with its creditors or any class of them, or with its members or any class of them;
- (d) has its approval pursuant to section 29A of the MAS Act withdrawn or revoked by MAS;
- (e) fails to comply with, observe or perform any of the clauses of this Agreement or the Rules, whether or not any other action is taken by the Service Provider under this Agreement or the Rules, and whether or not such failure has been determined in any such other action; or
- (f) fails to meet or fails to continue to meet, any of the access criteria.
- 9.2 The Participant shall immediately notify the Service Provider in writing upon the occurrence of any of the events set out under Clause 9.1(b), (c), (d) or (f).
- 9.3 The appropriate course of action as provided for in Clause 9.1 shall be determined by the Service Provider as it may, at its sole discretion, decide, but the Service Provider shall notify the Participant, all other participants and where applicable, the Clearing House, of any decision as soon as practicable.
- 9.4 In the event that the Service Provider suspends the provision of any or all of the MEPS+ Services to the Participant as a result of the occurrence of any of the events set out under Clause 9.1 (a), (d), (e) or (f), the transactions as set out in Rule 26.3 of the Rules may nonetheless be carried out by the Service Provider at its sole discretion.
- 9.5 Where the Service Provider has taken any action under Clause 9.1, the affected Participant shall be liable for the fees and charges up to the date of suspension or termination.
- 9.6 Where the Service Provider has suspended the provision of any or all of the MEPS+ Services to the Participant as a result of the occurrence of any of the events set out under Clause 9.1 (a), (d), (e) or (f), the affected Participant shall be liable for the fees and charges relating to any transaction set out in Rule 26.3 of the Rules.

10. AMENDMENT OF THIS AGREEMENT

- 10.1 The Service Provider reserves the right, from time to time and at any time, to amend the clauses of this Agreement or the Rules by deleting, substituting or adding to any of the clauses of this Agreement or the Rules, and where any amendment is made, the Service Provider shall give the Participant notice in writing of the amendment ("Notice of Amendment") at least 30 days before the day the amendment becomes effective and binding.
- 10.2 Where the Participant does not wish to continue with MEPS+ Services after a Notice of Amendment has been given, it shall notify the Service Provider in writing of its intention to terminate this Agreement within 14 days from the date of the Notice of Amendment, and the MEPS+ Services to the Participant shall be terminated on the day the amendment becomes effective and binding or at the end of the period stipulated in the notice of termination issued by the Participant in accordance with Clause 7.1, whichever is earlier. Where no such notice is given by the Participant within the 14-day period, the Participant shall be deemed to have accepted the provisions in this Agreement as amended on the date they become effective, and shall be bound by them as of the date of the amendments becoming effective as if the Participant had originally agreed to this Agreement on those terms. The Participant's continued use of MEPS+ services after the Notice of Amendment shall signify its consent thereto.
- 10.3 Notwithstanding Clauses 10.1 and 10.2, the Service Provider may cause any amendment to this Agreement to become effective and binding upon the Participant at any time if the Service Provider determines, at its discretion, that exigent circumstances exist which require that such amendment become effective for the protection of the Service Provider, national or public interest, public security or safety or for the Participant to comply with legal or regulatory requirements, provided always that this Clause 10.3 shall not apply to any amendment which would have the effect of rendering transactions settled under MEPS+ no longer final and irrevocable.
- 10.4 Notwithstanding any amendment referred to in this Agreement, the clauses of this Agreement applicable prior to the amendment shall apply and continue to apply to

anything done by the Participant or the Service Provider, or any event which has happened, as the case may be, before the amendment becomes effective, and for that purpose, any such amendment shall not have the effect of terminating this Agreement as it existed prior to the amendment.

11. LIABILITIES OF THE SERVICE PROVIDER

- 11.1 Subject to the provisions of this Clause 11, the Service Provider, its officers and employees, and any person acting under the direction of the Service Provider, shall not be liable for any loss or damage howsoever caused to the Participant or its customer resulting from the operation of MEPS+ or the provision of MEPS+ Services, including any action that may be taken by the Service Provider against any other Participant, unless the Service Provider or the relevant officer, employee or person acting under the direction of the Service Provider has been found guilty of a reckless act or omission, or of intentional misconduct, in a final decision made by a court in Singapore.
- 11.2 The Service Provider shall not be responsible or liable to the Participant or its customer for any error in, or any delayed execution, non-execution, part-execution or different execution of, any transaction under MEPS+ caused by any machine or hardware malfunction, software defect, or electrical, electronic, SWIFT-related, telecommunication, electrical power supply or other technical fault, to the extent that such malfunction, defect, fault or cause did not result from the reckless act or omission, or the intentional misconduct, of the Service Provider, its officer, employee or person acting under its directions.
- 11.3 Under no circumstances shall the Service Provider, its officers or employees, or any person acting under the direction of the Service Provider be liable for any loss or damage howsoever caused, to the Participant or its customer as a result of:
 - (a) the inability of the Participant to make or receive payment or to effect securities settlement as a result of the suspension or termination of MEPS+ Services under this Agreement;

- (b) the usage of the SWIFT Messaging Services, including but not limited to any loss or damage that may result from:
 - (i) the unavailability or deficiency in the SWIFT Messaging Services relating to the delivery and receipt of messages or instructions or the authentication mechanisms that may be provided by SWIFT; or
 - (ii) any negligent act or omission or wilful default by SWIFT.
- (c) the usage of non-SWIFT transmission channels in accordance with the contingency procedures set out in the Rules, MEPS+ Operations Manual and MEPS+ User Manuals, including but not limited to any loss or damage that may result from:
 - (i) the processing of any message or instruction by the Service Provider, where such message or instruction is given in writing or sent to the Service Provider through MASNET or physical electronic storage media and signed by authorised signatories of the Participant;
 - (ii) the processing of any message or instruction by the Service Provider, where such message or instruction relates to CLS payments and is sent by the Participant to the Service Provider through tested fax, CBCA, MASNET or physical electronic storage media;
 - (iii) the processing of duplicate messages or instructions that may be received by the Service Provider from the Participant;
 - (iv) the inability of the Service Provider or the Participant to view or read any message or instruction contained in any physical electronic storage media that is sent by the Participant to the Service Provider or vice versa;
 - (v) any error or omission in any message or instruction that is sent by the Participant to the Service Provider;
 - (vi) any error or omission in any statement or printout that is sent by the Service Provider to the Participant.
- 11.4 The Service Provider shall not be responsible for or liable to the Participant or its customer for any loss or damage arising from:
 - (a) unauthorised or erroneous payments or transfers made under MEPS+ by the Participant or its officer or employee;

- (b) the negligence, fraud, dishonesty, misconduct, unfamiliarity or omission of the Participant or its officer or employee in the use of MEPS+;
- (c) the non-cooperation of the Participant with another participant in the use of MEPS+;
- (d) the breach or non-observance by the Participant of this Agreement or the Rules;
- (e) any other cause due to the fault, act or omission of a customer of the Participant in connection with the use of MEPS+ by the Participant; or
- (f) any other cause due to the fault, default, act or omission of any person acting on behalf or under the direction of the Participant in connection with the direct or indirect use of MEPS+, or in connection with the installation, maintenance or operation of any equipment or software used or to be used for the purpose of MEPS+.
- 11.5 If any claim is made against the Service Provider and the same is proved to have resulted or arisen from any of the causes stated in Clause 11.4 with respect to the Participant, the Participant shall take reasonably appropriate action or proceedings to restrain the claimant or otherwise to keep the Service Provider harmless from the claim, and shall indemnify the Service Provider fully for any and all losses, expenses or costs incurred or sustained by it for the purpose of negotiating on, settling or defending the claim, including all legal costs on a full indemnity basis, provided that the Service Provider shall not negotiate or settle any claim without the prior consent of the Participant (whose consent shall not be unreasonably withheld), and in this regard, the Participant shall respond to the Service Provider within 14 days from the time of request by the Service Provider, failing which the Participant shall be deemed to have given its consent to the Service Provider. The Participant agrees that such duty to restrain, keep harmless and indemnify shall survive any termination of this Agreement and be binding on the assigns and successors in title of the Participant.

- 11.6 In all cases where the Participant or its customer has suffered any damage or loss which is recoverable under this Clause 11, the Service Provider shall not be liable for any collateral, indirect, consequential or special loss or damage howsoever caused and any liability on the part of the Service Provider shall in any event be limited to the aggregate of the following:
 - (a) an amount not exceeding the value of non-recoverable funds or securities which were or were to be transferred or settled ("non-recoverable amount") under MEPS+, the value of the funds or securities being ascertained as at the date the transaction was or was to be for value, and non-recoverability being ascertained as on the 7th business day after the date on which the transaction was or was to be for value, or such earlier date as the Service Provider may determine; and
 - (b) an amount equivalent to the aggregate daily interest on the non-recoverable amount from the date the loss or damage occurred up to and including the 7th business day thereafter, the applicable daily interest rate being the ABS K2 Rate + 1% in Singapore on the relevant day (and where any relevant day is not a business day, on the immediate preceding business day), where the ABS K2 Rate is the daily published Business Times' Interbank Overnight Offer rate.
- 11.7 Where the Service Provider has paid the Participant, or has paid the Participant for and on behalf of its customer, a sum equivalent to the non-recoverable amount and interest in accordance with Clause 11.6, the Service Provider shall be subrogated to the Participant or its customer or both, in respect of the beneficial title in the non-recoverable amount and of any right or entitlement in relation to the non-recoverable amount which the Participant or its customer may have against any person, to the extent of the sum so paid by the Service Provider, and the Service Provider shall:
 - (a) have and be entitled to the beneficial title in the non-recoverable amount, or any part thereof, which is recovered after the 7th business day from the date the transaction was or was to be for value; and
 - (b) be entitled to claim and pursue a claim against that person for the sum so paid together with interest and costs, without any direction from or interference by

the Participant or its customer. Notwithstanding this, the Participant shall assist and cooperate fully with the Service Provider in relation to any claim that the Service Provider may pursue, if such assistance or cooperation is required by the Service Provider.

12. INDEMNIFICATION OF THE SERVICE PROVIDER

- 12.1 Notwithstanding the termination of this Agreement, the Participant shall fully indemnify and keep fully indemnified the Service Provider on demand by the Service Provider against any and all losses, actions, claims, damages, costs and charges, including legal costs and charges, expenses and liabilities incurred or suffered by the Service Provider:
 - (a) as a result of any negligent or reckless act or omission or intentional misconduct of the Participant, its employees, affiliates or agents in connection with its performance or its breach or non-performance of this Agreement or the Rules; or
 - (b) arising directly or indirectly as a result of the usage of SWIFT Messaging Services, provided that such losses, actions, claims, damages, costs and charges, expenses and liabilities do not result from the wilful default, gross negligence or fraud of SWIFT; or
 - (c) arising directly or indirectly as a result of the usage of manual backup facilities.
- 12.2 For the purposes of this clause, the "liabilities" includes duties and obligations of every description, whether present or future, actual or contingent.

13. NOTICES AND COMMUNICATIONS

13.1 All notices and other communications in connection with this Agreement or the Rules shall be given in writing, and unless otherwise provided, shall be delivered by hand, facsimile, domestic or international mail, e-mail, MTx99 or such other means as the

Service Provider may determine from time to time, to such address as each party may notify the other in writing.

- 13.2 All such notices or communications may be delivered by any of the means specified below and shall be deemed to have been duly delivered:
 - (a) if sent by hand, when received;
 - (b) if sent by facsimile, when duly transmitted to the facsimile number of the addressee for the time being applicable;
 - (c) if sent by international mail, 10 business days after the date of posting;
 - (d) if sent by domestic mail, 2 business days after the date of posting;
 - (e) if sent by e-mail, 2 business days after the date of transmission to the e-mail address for the time being applicable; or
 - (f) if sent by MT x99, when the MTx99 message has been acknowledged and received by SWIFT for transmission to the intended party.

PROVIDED ALWAYS that any notice or communication under Clause 7, 8 or 9 shall not be regarded as having been duly delivered unless sent by hand or by mail.

14. ASSIGNMENT

- 14.1 The Service Provider may assign this Agreement or any of its rights under this Agreement to any other person by giving to the Participant at least 60 days' prior written notice.
- 14.2 The Participant shall not assign this Agreement or any of its rights under this Agreement without the prior written consent of the Service Provider.

15. GOVERNING LAW

This Agreement shall be governed by and construed in accordance with the laws of Singapore and all proceedings relating to any dispute arising from or in connection with this Agreement shall be commenced in the courts of Singapore and the Parties irrevocably submit to the exclusive jurisdiction of the courts of Singapore.

16. RIGHTS OF THIRD PARTIES

A person who is not a party to this Agreement shall have no right under the Contracts (Rights of Third Parties) Act (Cap. 53B) of Singapore to enforce any of the terms of this Agreement.

Signed for and on behalf of the Participant:	
Name of authorised officer (in BLOCK letters)	Signature
NRIC/Passport No.	
In the presence of:	
Name (in BLOCK letters)	Signature
NRIC / Passport No.	
Signed for and on behalf of the Service Provider:	
EXECUTIVE DIRECTOR (INFORMATION TECHNOLOGY)	Signature

Appendix 1 MEPS+ OPERATING RULES

OPERATING RULES IN RELATION TO THE NEW MAS ELECTRONIC PAYMENT AND BOOK-ENTRY SYSTEM

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OPERATING RULES IN RELATION TO THE NEW MAS ELECTRONIC PAYMENT AND BOOK-ENTRY SYSTEM ("MEPS+")

The Service Provider hereby makes the following Rules for the operation of a real-time gross settlement system known as the New MAS Electronic Payment and Book-Entry System for the transfer and settlement of Singapore dollar payment obligations and book-entry Singapore Government Securities and MAS Bills between or among participants and the Service Provider.

Part I – Preliminary

1. **Definitions**

1.1 In these Rules, the following words or expressions, unless where the context otherwise requires, shall have the following meanings:

"accompanied by payment under MEPS+" in relation to a Transaction, means that an instruction for IFT has been or is to be transmitted under MEPS+ in connection with the Transaction:

"agent clearing participant" means a participant that settles cheque, IBG and FAST transactions on behalf of another party;

"Agreement" means the MAS Electronic Payment and Book-Entry System Service Agreement of which these Rules form a part of;

"Appendix" means the appendix to the Agreement;

"bank" means a bank as defined in the Banking Act (Cap. 19);

"business day" means any day from Monday to Friday except a public or bank holiday in Singapore;

"clearing participant" means a bank or any person who submits a cheque, IBG or FAST to the Clearing House for clearing;

"CBCA" means the central bank contingency automation solution developed by CLS Bank International to provide a standardized and automated platform for payment message exchange in contingency situations for the CLS system;

"CLS Bank International" means the institution of the same name which is approved by MAS pursuant to section 29A of the MAS Act and having its registered or principal place of business at 32 Old Slip, 23rd floor, New York, New York, 10005, United States of America;

"CLS system" means the system for settling payment obligations and entitlements arising from foreign exchange and other transactions, operated by CLS Bank International:

"Clearing House" means the Clearing House established pursuant to section 59 of the Banking Act (Cap. 19);

"**computer output**" shall have the same meaning as ascribed to it under the Evidence Act (Cap. 97);

"Current Account" means a current account that a participant shall open with MAS for maintaining cash balances;

"Custody Cash Account" means a Singapore dollar account opened and maintained by MAS for a participant, in accordance with the "Terms and Conditions Governing the Operation of the Custody Cash Account of the Specified Institution";

"digital signature" means a cryptographic process by which a SWIFT message is signed with the sender's private signature key so that the recipient of the message with the corresponding public key can accurately determine that the message: originated from the sender and has not been altered since it was signed;

"DVP" means delivery-versus-payment;

"eApps" means the Singapore Government Securities Electronic Applications, an internet-based platform for information transmission relating to SGSMB transactions and SGSMB transactions between MAS and Primary Dealers, found at the internet website http://www.sgs.gov.sg;

"end of a business day" means the time of a business day when the host system ceases processing Transactions for value on that day, including any extension of time for the processing of Transactions on that day which the Service Provider may grant under these Rules;

"FAST" means Fast And Secure Transfers, being the name designated by the Committee of Management of the Singapore Clearing House Association as at 16 January 2015 for "Real-Time" having the same meaning as defined under the "Bye-Laws of Singapore Clearing House Association In Respect of G3";

"fees and charges" means the fees and charges set out in Appendix 2, including such fees and charges as may be revised by the Service Provider from time to time by amendment to Appendix 2 in accordance with the Agreement;

"FIFO" means first-in-first-out:

"free of payment under MEPS+" in relation to a Transaction, means no instruction for IFT has been or is to be transmitted under MEPS+ in connection with the Transaction;

"host system" means an online computer system operated by the Service Provider for the execution or settlement of Transactions, including any back-up online computer system by which the Service Provider operates a real-time gross settlement system in accordance with these Rules;

"**IBG**" means Inter-bank GIRO –having the same meaning as defined under Schedule C of the "Bye-Laws of Singapore Clearing House Association In Respect of G3";

"**IFT**" means funds transfers between the participants, and includes funds transfers pursuant to settlement of cheque, IBG and FAST transactions;

"intra-day MCB requirement" means the minimum amount of funds required to be maintained by banks between the start and the end of a business day of the same day, as part of their MCB requirement and as specified in the relevant Notice to Banks;

"MAS" means the Monetary Authority of Singapore, a body corporate established under the Monetary Authority of Singapore Act (Cap. 186);

"MAS Bills" means any debt securities issued by the Monetary Authority of Singapore under the Monetary Authority of Singapore Act (Cap. 186);

"MAS Transaction" means any transaction initiated by MAS to debit an RTGS Account but shall not include any transaction for payment by a participant to MAS for allotment of SGSMB;

"MASNET" means the financial communication network operated by MAS;

"MCB" means the minimum cash balance required to be maintained under the Banking Act;

"MCB funding period" means the period of time designated by MAS before the end of a business day during which a member bank shall have to meet such minimum MCB requirement at the end of a business day as specified in the relevant Notice to Banks;

"member bank" means a bank which is approved by MAS pursuant to section 29A of the Monetary Authority of Singapore Act to participate in MEPS+;

"member institution" means an institution which-

(a) is not a bank; and

(b) is approved by MAS pursuant to section 29A of the Monetary Authority of Singapore Act to participate in MEPS+;

"MEPS+" means the New MAS Electronic Payment and Book-Entry System and has the same meaning as set out in the Payment and Settlement Systems (Finality and Netting) (Designated System) Order 2012;

"MEPS+ Operations Manual" means the operations manual provided by the Service Provider to the Participant, as may be revised by the Service Provider from time to time;

"MEPS+ Services" means the services in relation to MEPS+ provided by the Service Provider in accordance with the Agreement;

"MEPS+ User Manuals" means the user manuals provided by the Service Provider to the Participant, as may be revised by the Service Provider from time to time;

"minimum MCB requirement" means the minimum amount of funds required to be maintained by banks at all times, except for the period between the start and the end of a business day of the same day, as part of their MCB requirement and as specified in the relevant Notice to Banks:

"minimum SGSMB-Reserve requirement" means the minimum value of SGSMB holdings required to be maintained by banks as part of their MLA requirement and as specified in the relevant Notice to Banks;

"MLA" means minimum liquid assets required to be held by banks under the Banking Act;

"non-participant" means an entity which is not a participant in MEPS+ but has a Current Account with MAS;

"Notice to Banks" means a notice in writing to banks in Singapore issued by MAS under the Banking Act;

"Offline Contingency Modules" has the same meaning as that set out in the Payment and Settlement Systems (Finality and Netting) (Designated System) Order 2012;

"participant" means either a member bank or a member institution;

"person" and "party" include any company or association or body of persons, corporate or unincorporate;

"physical electronic storage media" means any hardware or device approved by the Service Provider to store electronic or digital information, and includes hard drives, discs and cards;

"private signature key" means the key in a key pair that is private to the person who generates it and used only for the specific purpose of creating digital signatures for SWIFT messages;

"processing location" means the location at and from which the host system operates;

"**public key**" means the key in the key pair that can be publicly made known and used to verify the authenticity or integrity of SWIFT messages;

"Relationship Management Application" means the service provided by SWIFT that allows participants to control the messages that they want to send and or receive from other participants;

"RTGS" means real-time gross settlement;

"RTGS Account" means the real-time gross settlement account which a Participant has in MEPS+;

"Service Provider" means the operator of MEPS+;

"SGS" or "Singapore Government Securities", means Government securities as defined in and issued under the Government Securities Act (Cap 121A) and Treasury Bills as defined in and issued under the Local Treasury Bills Act (Cap 167) collectively;

"SGSMB" means SGS, MAS Bills, or both, as the case may be;

"SGSMB transaction" means a transaction for the sale, purchase, repurchase or transfer of SGSMB under MEPS+, whether for consideration or otherwise, and whether including or free of payment under MEPS+;

"start of a business day" means the time of a business day from which the host system is ready and able to process Transactions for value on that day;

"SWIFT" means the Society for Worldwide Interbank Financial Telecommunication SCRL, a society established and registered in Belgium that has set up an international value-added transport network for the provision of SWIFT Messaging Services;

"SWIFT CBT" means SWIFT computer based terminal, the hardware and software used to send and receive messages to and from the SWIFT network;

"SWIFT Messaging Services" means the messaging services provided by SWIFT to support access by the Participant to MEPS+ Services;

"SWIFT User Handbooks" means the user handbooks issued by SWIFT as may be revised by SWIFT from time to time.

"**Transaction**" means an IFT, SGSMB transaction or any other transaction which the Service Provider may introduce from time to time for execution or settlement under MEPS+, unless otherwise specified;

"transmit" means to send by electronic medium via the host system to or from the Service Provider or a participant, and "transmitted", "transmitting" and "transmission" shall be construed accordingly.

- 1.2 Save as set out above, all other terms referred to in these Rules shall have the same meanings as those given in Clause 1 of this Agreement.
- 1.3 Words importing the singular shall include the plural and *vice versa*, and words importing the masculine shall include the feminine and words importing the neuter gender shall include the masculine and feminine.
- 1.4 Headings used in these Rules have been added for convenience and for arranging the Rules only, and shall not constitute part of these Rules nor be used to interpret any Rule.
- 1.5 Reference to corporate bodies formed, incorporated or existing in or outside Singapore shall include their successors in title and assigns.
- 1.6 Unless otherwise provided, acts required, authorised or permitted to be performed by a body corporate may be performed by an officer or employee of the body corporate duly authorised, specifically or generally, by the management of the body corporate, and any person dealing with the body corporate shall be entitled to assume that such officer or employee has been so authorised in the absence of any indication to the contrary.
- 1.7 References in these Rules to the host system being required to do any act or being prohibited from doing any act shall be construed to mean that the Service Provider shall design the host system such that it carries out the act required or does not carry out the act prohibited, or such that it is capable of carrying out the act required or is incapable of carrying out the act prohibited, or install equipment and software in the host system designed to carry out the act required or not to carry out the act prohibited, or which have the capability to carry out the act required or are incapable of carrying out the act prohibited, depending on the context.

- 1.8 Reference in these Rules to a SWIFT CBT being required to do any act or being prohibited from doing any act shall be construed to mean that participants shall customise the SWIFT CBT such that it carries out the act required or does not carry out the act prohibited, or such that it is capable of carrying out the act required or is incapable of carrying out the act prohibited, or install equipment and software in the SWIFT CBT designed to carry out the act required or not to carry out the act prohibited, or which have the capability to carry out the act required or are incapable of carrying out the act prohibited, depending on the context.
- 1.9 The Service Provider may, subject to the provisions of these Rules, sub-contract or delegate to any other person or body corporate the performance or observance of any part of its responsibilities, obligations or undertakings, and in that event, any reference to the Service Provider in these Rules shall include such person or body corporate.

Part II - Service and Connection and general duties

2. Service and connection

- 2.1 The Service Provider shall commence operating MEPS+ from such date as it may specify in accordance with Clause 2 of this Agreement.
- 2.2 A participant may participate in MEPS+ by signing this Agreement with the Service Provider, upon which he shall become a participant with direct participation in MEPS+ and shall pay such joining and subscription fees and charges as may be specified by the Service Provider from time to time in this Agreement.
- 2.3 The Service Provider shall install, operate, maintain and upgrade the hardware and software in the host system at the processing location.
- 2.4 A participant shall, at its own expense, install, maintain, operate and upgrade one or more SWIFT CBTs which will allow the participant to perform the following functions:
 - (a) Message processing;

- (b) Queue management;
- (c) Online host enquiry;
- (d) Reports and backup;
- (e) User administration;
- (f) Static information management; and
- (g) Users' customised functions.
- 2.5 The Service Provider may, by notice in writing issued from time to time, make modifications to any of the functions mentioned in Rule 2.4 or introduce one or more additional functions as it deems necessary for the proper and efficient operation of MEPS+, but where any modification or introduction of functions is to be made, the Service Provider shall give prior written notice of at least 30 days before the date of the implementation of the modification or introduction.
- 2.6 The Service Provider and every participant shall, at the expense of the participant, make use of the SWIFT network, or an equivalent or better communication service as may be agreed with the Service Provider by notice in writing, to connect the SWIFT CBT of the participant with the host system.
- 2.7 In relation to the use of the SWIFT network for SWIFT Messaging Services, the Service Provider and participant agree as follows:
 - (a) That messages and instructions shall be interpreted according to SWIFT standards and MEPS+ specific conventions as set out in the SWIFT User Handbooks and MEPS+ User Manuals respectively;
 - (b) Every participant shall exchange authorisations for the Relationship Management Application with the Service Provider in accordance with the terms and conditions determined by the Service Provider; provided that where the participant accesses MEPS+ solely for the purpose of operating a clearing and settlement system, the participant shall only be required to exchange authorisations for the Relationship Management Application with its clearing and settlement members;
 - (c) Every participant shall bear all costs arising from the exchange of authorizations for the Relationship Management Application;

(d) No participant shall hold the Service Provider liable in any way for the inability of the participant to send or receive any payment to or from his counterparty due to the incomplete exchange of authorisations for the Relationship Management Application.

3. General duties

- 3.1 The Service Provider shall be responsible for the control, maintenance and security of and access to the host system, application software used in the host system and the processing location, and the costs connected therewith.
- 3.2 Every participant shall be responsible for:
 - (a) the control, maintenance and security of and access to the SWIFT CBT, back-up SWIFT CBT and communication lines within the premises used or occupied by the participant;
 - (b) the operation of the SWIFT CBT and back-up SWIFT CBT, and the operation and security of all software used in the SWIFT CBT and back-up SWIFT CBT, within the premises used or occupied by the participant;
 - (c) providing the necessary business resumption and recovery measures to ensure the continuity of operations of its SWIFT CBT and communication facilities;
 - (d) maintaining, operating and upgrading its SWIFT CBT to provide adequate capacity to handle Transactions of the participant and ensure maximum system availability during the MEPS+ operating hours;
 - (e) any work or servicing done or to be done to the SWIFT CBT and communication lines situated outside the processing location,

and all costs connected therewith.

- 3.3 Every participant shall adhere to the security guidelines issued from time to time by:
 - (a) the Service Provider in relation to the operations and maintenance of MEPS+; and

- (b) SWIFT in relation to the services that are provided by SWIFT in support of the MEPS+ Services.
- 3.4 Every participant shall take stringent measures to protect and safeguard the security of its authorisation(s) for the Relationship Management Application and certificates and prevent the compromise of the same, and shall take immediate action in accordance with procedures laid down in the SWIFT User Handbook in the event its authorisation(s) for the Relationship Management Application or certificates are compromised.
- 3.5 The Service Provider shall be entitled, at any time, to conduct an inspection of the premises of a participant with a view to determining whether internal controls and procedures established relating to the security of and access to the SWIFT CBT are adequate and meet the requirements of the Service Provider, and, for that purpose, the Service Provider and its officers shall be allowed full access into the premises and to the SWIFT CBT of the participant, and to all relevant documents and records, whether in paper or electronic form or otherwise, and the officials and employees of the participant shall furnish such information truthfully and accurately, and produce such documents and records promptly, as may be required by the Service Provider or its officers.
- 3.6 Where in an inspection referred to in Rule 3.5, any deficiency in the internal controls or procedures is found, or the internal controls or procedures are, or some aspects of the internal controls or procedures are, non-existent, the Service Provider may direct that the participant take immediate steps to rectify the deficiency or establish appropriate or incorporate additional appropriate features into its internal controls and procedures, and the participant shall comply with the direction accordingly and inform the Service Provider in writing when it has so complied.
- 3.7 The participant which has been directed in accordance with Rule 3.6 may be required by the Service Provider to, and when so required shall, submit in writing for the approval of the Service Provider the steps it proposes to take to comply with that direction, and when those steps have been taken, shall inform the Service Provider in writing of the fact.

- 3.8 No participant shall at any time assign, lease or license to any other person or dispose of, in whole or in part, the MEPS+ services provided by the Service Provider or any benefit or advantage derived from the provision of such services, except in accordance with the provisions of these Rules or as approved by the Service Provider in writing.
- 3.9 In line with Rule 3.2(c), where a participant relocates or upgrades its SWIFT CBT, the participant shall, before commencing the operation of its CBT for processing Transactions:
 - (a) conduct adequate testing of the SWIFT CBT, taking into consideration both the scope and intensity of the changes that have taken place to ensure that all changes are implemented correctly; and
 - (b) plan for business resumption and recovery measures to deal with any potential operational disruption.
- 3.10 Every participant shall perform its own assessment of adherence to the security guidelines and ensure that an independent internal or external audit is conducted as to the participant's adherence to the security guidelines, biennially or on such other frequency as may be agreed in writing by the Service Provider. The outcome of the audit shall be made available to the Service Provider upon request.

Part III - Operation of SWIFT CBT

4. Message processing

- 4.1 Every SWIFT CBT shall provide such facility for the creation, transmission, confirmation and cancellation of messages so as to enable participants to carry out instructions to execute or cancel any Transaction.
- 4.2 Every participant shall submit messages according to the SWIFT standards and MEPS+ specific conventions set out in the SWIFT User Handbooks and MEPS+ User Manuals respectively.
- 4.3 Instructions for Transactions pending settlement or execution, including forward-dated Transactions before their value date (but excluding SGSMB transactions), may be cancelled by the participant which initiated the Transaction.

- 4.4 For any SGSMB transaction that is not matched, the participant that sent the instruction may initiate its cancellation. For any SGSMB transaction that is matched, both participants that are parties to the transaction are required to initiate and confirm the cancellation.
- 4.5 A cancellation request shall be unsuccessful if the Transaction is settled before the host system receives the request for cancellation.
- 4.6 Notwithstanding any provision in these Rules, participants shall not be able to cancel, through their SWIFT CBT, instructions for IFT or SGSMB transactions that are initiated by the Service Provider or by MAS.
- 4.7 Participants shall be responsible for putting in place adequate controls to prevent the unauthorised use of their SWIFT CBT and the unauthorised transmission of messages via their SWIFT CBT, and shall conduct regular checks to ensure that the integrity of their SWIFT CBT and message transmissions via their SWIFT CBT is maintained.

5. Queue Management

- Any IFT transaction that is not settled immediately shall be processed in the order of priority set out in Rule 5.2, and within the same priority level, according to FIFO principles, subject to any exception that the Service Provider may consider necessary (e.g. during gridlock resolution).
- For the purposes of Rule 5.1, the IFT transactions shall be processed in the following descending order of priority:
 - (a) MAS Transactions;
 - (b) Cheque, IBG and FAST clearing transactions;
 - (c) Express payments;
 - (d) SGSMB transactions;
 - (e) Normal payments.

- 5.3 Every participant shall make all payments in MEPS+ in accordance with the priority levels that relate to the relevant Transactions. In particular, any payment that is made to settle an obligation arising from:
 - (a) an SGSMB transaction shall be made at priority level "SGSMB Transactions"; and
 - (b) a cheque, IBG or FAST clearing transaction shall be made at priority level "Cheque, IBG and FAST Clearing Transactions".
- Queued payments which cannot be processed at the end of a business day shall be rejected and affected participants shall be informed of such rejected payments through appropriate SWIFT messages.
- Participants may change the priority of queued payments only for Transactions at priority level "Normal Payments" or "Express Payments".
- Participants may put on hold a queued payment or group of payments, and may release a payment or group of payments that has been put on hold by user command only for Transactions at priority level "Normal Payments" or "Express Payments".

6. Minimum log-on time

- 6.1 The Service Provider may issue a notice in writing to all participants or a class of participants requiring such participants to log on to their SWIFT CBT for such minimum period or periods of time on such business day or days as the Service Provider may determine in the notice for the purpose of sending and receiving transmitted messages and instructions, and the participants concerned shall comply with such notice.
- A clearing participant that has not appointed an agent clearing participant or whose appointment of an agent clearing participant has ceased or has been terminated without another agent clearing participant being appointed in its place, shall log on to

its SWIFT CBT for the purpose of settlement of mid-day and end-of-day cheque, IBG and FAST clearing.

7. Online Information, Query and Control Services

- 7.1 Participants may access online information, query and control services in MEPS+ through the SWIFTNet Interactive Services provided by SWIFT. Participants may obtain access to SWIFTNet Interactive services at their own cost.
- 7.2 The Service Provider shall provide such online information, query and control services through the host system as the Service Provider may determine from time to time.
- 7.3 The Service Provider shall be entitled, at its sole discretion and at any time, to make modifications to or withdraw any type of online information, query and control services as it sees fit.
- 7.4 Every participant shall use the online information, query and control services with care, and shall prevent the misuse of the bandwidth and MEPS+ resources.
- 7.5 The Service Provider reserves the right, by giving at least 3 days' prior written notice, to suspend or deny access by any participant to any or all of the online information, query and control services if the participant is, in the opinion of the Service Provider, misusing or abusing any of these services.

8. User administration

- 8.1 Every participant shall appoint a MEPS+ administrator and an alternate administrator, whose duties are:
 - (a) to create and delete users who are authorised to access the online information, query and control services; and

(b) to define and maintain their security profiles and rights to access the services provided.

Part IV - Operation of the host system

9. General

- 9.1 The host system shall provide the following functions:
 - (a) immediate and irrevocable IFT, including settlement of cheque clearing, IBG clearing, FAST clearing and payment for SGSMB purchases; and
 - (b) transfer of SGSMB and DVP settlement of SGSMB.
- 9.2 Subject to these Rules, the host system shall process same-day-value and forward-dated Transactions during the operating hours of MEPS+ on any business day. Forward-dated Transactions received shall be stored in the host system database and the host system shall process such Transactions only on their value date.
- 9.3 (a) Where the value date of a forward-dated Transaction is a Saturday, Sunday or a public holiday in Singapore, any attempt to transmit a message or instruction for the Transaction shall be rejected by the host system. The participant that initiated the transmission shall be notified of the rejection by the host system.
 - (b) Where at the date at which the message or instruction for a forward-dated Transaction was transmitted, the value date was not a public holiday but is subsequently declared to be a public holiday (hereinafter "ad hoc public holiday"), the host system shall process such forward-dated Transactions (including an SGSMB transaction that has been matched before the ad hoc public holiday) on the business day immediately following that ad hoc public holiday. In the case of an SGSMB transaction that has not been matched before that ad hoc public holiday, the host system shall reject such SGSMB transaction at the start of the business day immediately following that ad hoc public holiday.

- 9.4 Subject to these Rules, the host system shall accept same-day-value Transactions between the start of a business day and the end of the business day on the business day in which the Transaction is for value, or from such earlier time on a business day as the Service Provider may by notice in writing determine.
- 9.5 Subject to these Rules, the host system shall accept instructions for forward-dated Transactions during such hours of a business day as the Service Provider may designate by notice in writing, either generally or specifically.
- 9.6 All same-day-value and forward-dated Transactions shall be credited to or debited from (if there are sufficient funds) the RTGS Account of the participant on the same day or value date, as the case may be.
- 9.7 The operating hours of the host system shall be during such times on such business day or days as set out in Schedule 1 to these Rules, or on such other times on such other business day or days as the Service Provider may designate by notice in writing.

10. Funds transfers between participants

- 10.1 Every participant shall be provided with an RTGS Account.
- The funds of a participant in its Current Account (if any) that are in excess of the intra-day MCB requirement determined by MAS, if applicable, shall be transferred to its RTGS Account at the start of the business day, and any balance remaining in its RTGS Account at the end of the operating hours of MEPS+ on the same business day shall be transferred back to the participant's Current Account (if any). The Service Provider shall not be liable to any participant for any unsuccessful transfer of funds from the Current Account to the RTGS Account or vice versa, howsoever caused.
- The RTGS Account shall be used only for the transfer of funds between participants or between MAS and a participant, as the case may be, for the settlement of cheque, IBG and FAST clearings, and Transactions.

- The host system shall only process same-day value IFT transactions. Nonetheless, the host system may accept forward-dated IFT transactions of up to 14 business days in advance (or such other period as the Service Provider may from time to time notify in writing), which shall only be processed on their value date.
- Subject to Rules 10.6, 12.7 and 12.9, IFT transactions shall be initiated by the participant which is effecting the transfer of funds.
- The instructions of a participant for fund transfers to MAS may be initiated by the participant, the Service Provider or MAS, as the case may be, under the following circumstances:
 - (a) for the purpose of crediting into the Current Account or Custody Cash Account of the participant;
 - (b) for the repayment of any amount that is due from the participant to MAS whether under this Agreement or otherwise, e.g. for the return of funds under the Intraday Liquidity Facility;
 - (c) to give effect to any instruction that is given by the participant to the Service Provider in accordance with the procedure set out in Rule 19;
 - (d) for processing any transfer required to be made under any written law or in a decision made by a court in Singapore; or
 - (e) for processing any transfer from the participant to MAS for which MAS has received written authorisation from the participant to initiate.
- 10.7 IFT transactions transmitted shall be immediately and irrevocably settled by the host system if the participant from which funds are to be debited has sufficient available funds in its RTGS Account. IFT transactions that are not settled immediately shall be queued in the manner set out in Rule 5.1.
- 10.8 IFT transactions still pending settlement in queues at the end of a business day shall be automatically cancelled by the host system and the Service Provider shall transmit through the host system to each affected participant messages indicating the failed status of each cancelled IFT transaction.

11. Cheque, IBG and FAST clearing

- 11.1 Member banks which settle or expect to settle cheque, IBG or FAST clearing obligations are required to complete and return to the Service Provider the authorisation form set out in Schedule 2 to authorise the Service Provider to credit or debit their RTGS Accounts in accordance with the cheque, IBG or FAST clearing figures provided by the operator of the Clearing House to the Service Provider for cheque, IBG or FAST respectively. Such member banks shall settle all their obligations arising from the cheque clearing facility, IBG clearing facility and FAST clearing facility at such times as MAS may designate by notice in writing.
- 11.2 The Service Provider shall transmit to relevant member banks at such time or times on every business day as MAS may designate by notice in writing as mid-day clearing, the net cheque and FAST transaction clearing figures for mid-day cheque clearing and FAST transaction clearing (collectively referred to as "mid-day net cheque and FAST transaction clearing figures") and the names of net credit member banks.
- 11.3 Immediately following the transmission of the mid-day net cheque and FAST transaction clearing figures, respectively, member banks with net debit figures and which do not have sufficient available funds in their RTGS Account to cover their net debit positions shall obtain funding for their mid-day cheque and FAST transaction clearing, respectively, during the mid-day funding period to cover their positions.
- The respective mid-day funding period for settlement of cheque and FAST transaction clearing shall be during such period or periods of time on every business day as MAS may designate by notice in writing.
- The Service Provider shall transmit to relevant member banks at such time or times on every business day as MAS may designate by notice in writing as end-of-day clearing, the net cheque, IBG and FAST clearing figures (collectively referred to as

"end-of-day net cheque, IBG and FAST clearing figures") and the names of net credit member banks for the end-of-day cheque, IBG and FAST clearing for that day.

- Immediately following the transmission of the end-of-day net cheque, IBG and FAST clearing figures, member banks with net debit figures and which do not have sufficient available funds in their RTGS Account to cover their net debit positions shall obtain funding for their end-of-day cheque, IBG and FAST clearing, respectively, during the end-of-day funding period to cover their positions.
- The respective end-of-day funding period for settlement of cheque, IBG and FAST clearing shall be such period or periods of time on such business day or days as MAS may designate by notice in writing.
- 11.8 If a member bank with net debit cheque, IBG or FAST clearing figure is unable to make settlement at the end of each funding period (the "defaulting member bank"), the Service Provider may do the following:
 - (a) For mid-day cheque or FAST transactions clearing, suspend the settlement of mid-day cheque or FAST transactions clearing of all member banks, delete the posted mid-day net cheque or FAST transactions clearing figures of all the member banks from payment queues and the figures will be incorporated into the end-of-day net cheque or FAST transactions clearing figure of all the member banks; and
 - (b) For end-of-day cheque, IBG and FAST transaction clearing, suspend the settlement of end-of-day cheque, IBG and FAST transaction clearing of all member banks and delete the end-of-day cheque, IBG and FAST transaction clearing figures of all member banks from payment queues. The Service Provider may carry out settlement for the end-of-day cheque, IBG and FAST transaction clearing when the new end-of-day cheque, IBG and FAST transaction clearing figures, which do not include the clearing figures of any defaulting member bank, are provided by the operator of the Clearing House to the Service Provider.

- 11.9 Member banks shall ensure that there are sufficient funds in their RTGS Account to meet their clearing obligations. Member banks may obtain short-term credit from MAS through MEPS+ to cover their clearing obligations subject to such terms and conditions as MAS may determine and on a case-by-case basis.
- 11.10 A defaulting member bank shall be charged an administrative fee in accordance with the terms set out in Schedule 3 to these Rules.
- 11.11 The administrative fee referred to in Rule 11.10 shall be a debt due to the Service Provider and shall be deducted from the Current Account of the defaulting member bank on the next business day after the business day on which the default occurred.
- 11.12 Any administrative fee imposed shall not be in substitution or derogation of, or preclude the exercise by the Service Provider or any member bank of, any right or claim which the Service Provider or the member bank has or is entitled to in any action, suit or proceeding in a court of law arising from the failure of any member bank to settle its position in relation to a cheque, IBG or FAST clearing.
- 11.13 The Service Provider shall not be bound to verify the correctness or accuracy of the cheque, IBG or FAST clearing figures that it receives from the Clearing House and, for the avoidance of doubt, shall not be liable for any loss or damage that may be caused to any participant as a result of any inaccuracy or mistake in the cheque, IBG or FAST clearing figures.
- 11.14 A defaulting member bank shall submit a letter of explanation to the Service Provider within two weeks after the date of its failure to meet its clearing obligations.

12. SGSMB transactions and DVP

12.1 MEPS+ shall provide member banks with an SGS account which shall be divided into the following sub-accounts:

- (a) SGS-Reserve Account To be used by member banks to deposit SGSMB for compliance with the MLA requirement;
- (b) SGS-Trade Account To be used as a settlement account for the transfer of SGSMB to or from member banks pursuant to an SGSMB transaction; and
- (c) SGS-Customer Account To be maintained only by member banks which are primary or approved dealers and used to hold and transfer SGSMB for and on behalf of the member banks' customers.

12.2 A member bank may transfer SGSMB:

- (a) from its SGS-Trade Account to its SGS-Reserve Account by transmitting the appropriate instruction to effect the transfer, and such transfer shall be executed immediately except that the host system shall reject the transfer if there are insufficient available SGSMB of the specified issue in its SGS-Trade Account;
- (b) from its SGS-Reserve Account to:
 - (i) its SGS-Trade Account; or
 - (ii) the SGS-Trade Account, SGS-Customer Account or SGS-Reserve Account of another member bank, by transmitting the appropriate instruction to execute the transfer, but the host system shall reject any such transfer if the value of the remaining SGSMB in its SGS-Reserve Account after such transfer would be less than the minimum SGS-Reserve requirement or if there are insufficient available SGSMB of the specified issue in its SGS-Reserve Account;
- (c) from its SGS-Trade Account or SGS-Customer Account to any SGS subaccount of another member bank or the SGS-Reserve Account of a nonparticipant by transmitting the appropriate instruction to execute the transfer and the transfer shall be effected in accordance with Rules 12.6 to 12.11 but such transfers to a non-participant shall be free of payment under MEPS+; or
- (d) from its SGS-Customer Account to any of its other SGS sub-accounts, such transfer being free of payment under MEPS+, but the transfer shall be rejected by the host system if there are insufficient SGSMB of the specified issue in the SGS-Customer Account.

The Service Provider may effect any of the above transfers on behalf of the member bank concerned where the Service Provider is authorised to do so or for the purpose of or pursuant to the exercise of its powers or compliance with any requirement under any written law where the circumstances so require it.

- SGSMB may also be transferred between MAS and a member bank, or between any SGS sub-accounts of the member bank and MAS, whether the transfer is accompanied by payment or is free of payment under MEPS+.
- A transfer of SGSMB through MEPS+ shall be effected by the host system making an appropriate entry in the applicable SGS sub-account of the member bank effecting the transfer, and in the applicable SGS sub-account of the member bank or non-participant receiving the transfer of SGSMB.
- 12.5 Member banks may carry out SGSMB transactions either on their own accounts or on behalf of their customers.
- Member banks may transmit forward-dated instructions to carry out SGSMB transactions during such times of a business day as the Service Provider may designate in writing up to 90 days in advance, and in the case of the forward leg of repurchase transactions, up to 90 days in advance. All forward-dated instructions for SGSMB transactions shall only be processed by the host system on their value date and placed in queue by the host system for settlement on a FIFO basis according to the date and time the host system receives confirmation of the instruction.
- 12.7 Subject to these Rules, where a member bank transmits an instruction for the transfer of SGSMB from its SGS-Trade Account or SGS-Customer Account to another member bank or a non-participant:
 - (a) the member bank to whom SGSMB are to be transferred shall transmit a matching instruction; and
 - (b) if the member bank transferring SGSMB:

- (i) has insufficient SGSMB of the specified issue, the host system shall place the instruction in queue, pending the availability of SGSMB of that issue; or
- (ii) has sufficient SGSMB of the specified issue, or if, its instruction having been placed in queue according to paragraph (b) of this Rule, it subsequently has sufficient SGSMB of the specified issue available, then if the Transaction:
 - (A) is to be accompanied by payment under MEPS+, the host system shall earmark the SGSMB, designate the Transaction as one awaiting funds cover and transmit an IFT instruction on behalf of the member bank which is to make the payment, to be placed in queue at priority level "SGSMB Transactions"; or
 - (B) is to be free of payment under MEPS+, the transfer of the SGSMB shall be immediately and irrevocably executed.
- Once the member bank on whose behalf the host system has transmitted an IFT instruction in accordance with Rule 12.7(b)(ii)(A), has sufficient funds in its RTGS Account and there are no higher priority outgoing payments in its payment queues, the host system shall effect a DVP settlement of the Transaction by immediately and irrevocably debiting and crediting SGSMB and funds from and to the respective RTGS Accounts of the parties.
- 12.9 Subject to these Rules, where MAS transmits an instruction to execute an SGSMB transaction with a member bank:
 - (a) the member bank shall transmit a matching instruction, except where the instruction from MAS results from a bid that was submitted by the member bank in the eApps; and
 - (b) if MAS or the member bank transferring SGSMB has sufficient SGSMB of the specified issue, or if, its instruction having been placed in queue, it subsequently has sufficient SGSMB of the specified issue available, and the Transaction:
 - (i) is to be accompanied by payment under MEPS+, the host system shall earmark the SGSMB, designate the instruction as one awaiting funds

- cover and transmit an IFT instruction on behalf of MAS or the member bank which is to make the payment under MEPS+, to be placed in queue at priority level "SGSMB Transactions"; or
- (ii) is to be free of payment under MEPS+, the transfer of the SGSMB shall be immediately and irrevocably executed.
- 12.10 Once MAS or the member bank on whose behalf an IFT instruction was transmitted in accordance with Rule 12.9(b)(i), has sufficient funds in its RTGS Account and there are no higher priority outgoing payments in MAS' or the member bank's payment queues, the host system shall effect a DVP settlement of the transaction by immediately and irrevocably debiting and crediting SGSMB and funds from and to the respective accounts of the parties.
- In any SGSMB transaction between MAS and a member bank, the Service Provider may, before transmitting the instruction to execute or settle the transaction, designate, through the host system, whether the instruction, if placed in queue, is to have priority over other instructions for SGSMB transactions which have been placed in queue for the transfer of SGSMB of that issue from MAS or any SGS sub-account of that member bank, and upon such designation of priority, the host system shall execute or settle that transaction before any of those other transactions, and between or among two or more such SGSMB transactions for the transfer of SGSMB from MAS or the same SGS sub-account of that participant having such priority, the host system shall execute or settle such transactions on a FIFO basis.
- 12.12 Instructions for SGSMB transactions placed in queue, except those involving MAS, may be cancelled by any member bank which is party to the transaction in accordance with Rules 4.3 and 4.4 and subject to Rule 4.5.
- 12.13 Same-day-value or forward-dated SGSMB transactions which, at the end of the business day on which the transaction is for value, are still pending settlement in queues or pending confirmation by the member bank to which SGSMB are to be transferred, shall be cancelled by the host system and the Service Provider shall make available, through the host system, to each affected member bank (including the

counterparty) messages listing the SGSMB transactions of that member bank which were cancelled at the end of that business day.

13. Maintenance of the MCB

- 13.1 The host system may transfer such amount of funds from the member bank's Current Account to its RTGS Account at the start of a business day, leaving such balance that count towards meeting the intra-day MCB requirement of the bank. The balance funds in a Current Account that count towards meeting the intra-day MCB requirement shall be maintained continuously in the account from the start of a business day to the end of the business day.
- MAS may, at its sole discretion, direct the Service Provider to extend the end of a business day on any business day for the purpose of extending an MCB funding period where the exigencies of the situation require it.
- 13.3 During an MCB funding period, the host system shall automatically transfer funds from the RTGS Account to the Current Account of member banks to enable those banks to meet the minimum MCB requirement, and the host system shall not make any outgoing payments from the RTGS Account of those member banks during that period until the minimum MCB requirement is met.
- 13.4 If the minimum MCB requirement of a member bank is met before the end of an MCB funding period, all subsequent funds coming into the RTGS Account of that member bank may be used to meet outgoing payments of the member bank from the time the minimum MCB requirement is met.

14. Intra-day Liquidity Facility

- Subject to this Rule, an intra-day liquidity facility that is offered by MAS may be accessed by participants through MEPS+.
- 14.2 Any participant who wishes to access this facility shall:

- (a) meet the eligibility criteria as determined by MAS; and
- (b) execute all necessary agreements and comply with any other conditions that may be set by MAS.
- 14.3 Access to this facility shall not be granted by the Service Provider unless the Service Provider has been notified by MAS that the requirements set out in Rule 14.2 have been satisfied.
- 14.4 The Service Provider shall not be responsible for any participant's ineligibility or inability to access or use the intra-day liquidity facility.

Part V - General administration

15. Gridlock Resolution

- 15.1 Every participant agrees to the use of the gridlock resolution algorithms provided from time to time by the Service Provider for the settlement of queued payments and instructions relating to securities.
- 15.2 Gridlock resolution algorithms provided by the Service Provider:
 - (a) may settle queued Transactions at any time of the day, as and when activated by the Service Provider; and
 - (b) may, notwithstanding Rule 5.1, settle queued Transactions in any order and not necessarily in the order shown in the participant's queue.

Any, all or none of the participant's queued Transactions may be settled by the gridlock resolution algorithm when it is activated.

- 15.3 To facilitate and maximise the effectiveness of gridlock resolution, all participants shall:
 - (a) enter all payments and securities settlement instructions as early as possible;
 - (b) minimise usage of payment limits by time and counterparty; and

- (c) minimise the usage of functions provided in MEPS+ to prevent a queued instruction from being executed (e.g. holding of payments instructions).
- 15.4 The Service Provider reserves the right not to apply gridlock resolution algorithms to any or all of a participant's Transactions at any time, and to exclude the participant's Transactions from any further gridlock resolution processing, if the participant:
 - (a) fails to comply with the requirements in Rule 15.3; or
 - (b) does anything that hampers or has the effect of hampering the effectiveness of the gridlock resolution mechanism.

16. Authenticity, certainty and irrevocability of messages

- All participants and the Service Provider agree to use the Relationship Management Application, public key infrastructure and any other means of authentication that may be provided by SWIFT (referred to in this Rule as "SWIFT authentication mechanism") for the transmission of messages and instructions under MEPS+.
- A transmitted message or instruction received by the host system which is determined by using SWIFT's authentication mechanism to be sent by a participant shall be deemed to have been duly transmitted by that participant with the authority of that participant and to be the same as that transmitted by the participant, and neither that participant nor any other participant shall be entitled to dispute the occurrence of that message or instruction, the fact that that message or instruction was transmitted by the participant identified by the SWIFT authentication mechanism as the sender, the authority of the participant or its official in transmitting the message or instruction, or the accuracy or integrity of the message or instruction, in any claim before or proceeding in a court of law or any action taken under these Rules arising from any Transaction under MEPS+.
- Where the authorisation(s) for the Relationship Management Application or any other means of authenticating a participant have been revoked, all messages or instructions transmitted by that participant prior to the revocation but pending settlement by the

host system shall be rejected by the host system, but any such message or instruction which has been settled by the host system before the authorization(s) for the Relationship Management Application or other means of authenticating that participant were revoked shall be and remain irrevocable as far as MEPS+ is concerned, subject to these Rules.

Any participant whose authorization(s) for the Relationship Management Application or other means of authentication has been compromised, lost, revoked or otherwise rendered unfit for use shall inform the Service Provider as soon as practicable.

17. Finality and irrevocability of Transactions and settlements

- 17.1 Payments, SGSMB transactions, and net cheque, IBG and FAST obligations are deemed entered into MEPS+ from the moment they are validated by the host system.

 The:
 - (a) transfer of funds into and out of an account of a participant of MEPS+;
 - (b) settlement of any payment obligations in MEPS+; or
 - (c) the settlement and transfer of book-entry SGSMB in MEPS+,

shall be final and irrevocable.

- 17.2 Neither the Service Provider nor its officers shall be under any duty to enquire into or ascertain the legality, validity or enforceability of any Transaction executed or to be executed, settled or to be settled, under MEPS+, or whether any such Transaction or the underlying contract connected with such Transaction is void or voidable.
- The Service Provider shall be entitled to assume that all Transactions executed or to be executed, settled or to be settled, are legal, valid and enforceable, and the Service Provider shall be under no duty to reject, reverse, rectify, adjust or modify any Transaction by reason that it was void, illegal, invalid or unenforceable, if the Transaction may otherwise be executed or settled under these Rules.

- The Service Provider shall not be under any duty to any participant to reject, reverse, rectify, adjust or modify any Transaction executed or to be executed, or settled or to be settled, by reason of any defect, forgery, theft, discovery without authority, failure or unauthorised copying, of any software, digital signature, authorisation(s) for the Relationship Management Application, SWIFT certificate, private key or public key, password, code or secret number, or any combination of them, assigned to or designated by a participant or the Service Provider.
- In the event of a dispute between customers of a participant or of two or more participants, or between a participant and its customer or the customer of another participant, or between participants, arising from or pertaining to any Transaction executed or to be executed, settled or to be settled, under MEPS+, including any claim that funds or SGSMB held by a participant are security for a debt or liability or held on trust, or any claim to having taken a security over, or having a beneficial interest in or lien over, funds or SGSMB held by a participant, the Service Provider shall not be under any duty to determine any claim in the dispute, or interfere with, adjust or modify the operation of MEPS+, or reject any message or instruction, or reverse any Transaction, to give effect to or uphold any claim, if the transaction may otherwise be executed or settled under these Rules.
- 17.6 No participant shall challenge the validity of any Transaction executed or settled under MEPS+ on the ground that the Transaction was not executed or settled pursuant to or accompanied by a formal or paper-based instrument of transfer, or was not evidenced in writing on paper, or was not attested to by the handwritten signature of any person.

18. When figures posted in accounts to be conclusive

All figures posted to the Current Account, Custody Cash Account, RTGS Account, SGS-Reserve Account, SGS-Trade Account and SGS-Customer Account of a participant as indicating the amount of funds or SGSMB, as the case may be, credited, debited or in balance in the respective account, shall be deemed to be final and conclusive evidence of the Transaction as against the participant one business day

after the date the figure was posted and no transmitted notice was received by the Service Provider from the participant within that time that the figure is incorrect.

- All figures set out in the statement of accounts (including the balances in the RTGS Account, Current Account and Custody Cash Account) that is sent by the Service Provider to a participant shall be deemed to be correct one business day after the date the statement of accounts is sent to the participant if no transmitted notice is received by the Service Provider from the participant within the time stating that the figure is incorrect.
- 18.3 If the Service Provider receives any notice from a participant that any figure that is posted or set out is incorrect within the period stipulated in Rule 18.1 or 18.2 and the Service Provider is of the view that the figure is incorrect, the Service Provider shall adjust the figure in the affected account or statement of account of that participant, as the case may be, within such time as is reasonably practicable. If the Service Provider receives such notice from a participant outside the period stipulated in Rule 18.1 or 18.2 and the Service Provider is of the view that the figure is incorrect, the Service Provider may, at its sole discretion, adjust the figure.

19. Manual Backup Facilities

19.1 In the event that:

- (a) the SWIFT network communications is not available to the Service Provider or any participant or both the Service Provider and the participant; or
- (b) the participant's SWIFT CBT is unable to communicate with the host system or is shut down,

the Service Provider or participant, as the case may be, shall use MASNET, physical electronic storage media, hand-delivered instructions signed by at least two authorised signatories, or (in the case of payments relating to the CLS system) tested fax, or CBCA, until SWIFT network communications or the participant's SWIFT CBT is restored.

- 19.2 If a participant wishes to send any message using MASNET, physical electronic storage media, hand-delivered instructions, or (in the case of payment relating to the CLS system) tested fax, or CBCA, the participant shall:
 - (a) inform the Service Provider of its need to use MASNET, physical electronic storage media, hand-delivered instructions, tested fax or CBCA through the helpdesk number provided for MEPS+, or any other possible means of communication if it is unable to use the helpdesk number. The participant may be required to complete authentication procedures to verify the authenticity of its request;
 - (b) obtain confirmation from the Service Provider that it is ready to accept MASNET, physical electronic storage media, hand-delivered instructions, tested fax or CBCA;
 - (c) send its messages to the Service Provider using MASNET, physical electronic storage media, hand-delivered instructions, tested fax or CBCA according to the procedures and formats as set out in Appendix 4, MEPS+ Operations Manual and MEPS+ User Manuals respectively. The participant's instructions may not be processed if the procedures and formats as set out in Appendix 4, MEPS+ Operations Manual and MEPS+ User Manuals are not followed;
 - (d) where it has started sending messages using MASNET, physical electronic storage media, hand-delivered instructions ,tested fax or CBCA, not make payments from its SWIFT systems until advised otherwise by the Service Provider to minimise possible instances of duplicate instructions through SWIFT on the one hand and MASNET, physical electronic storage media, hand-delivered instructions, tested fax or CBCA on the other hand;
 - (e) update the Service Provider at least every thirty (30) minutes on the status of any of the event(s) in Rule 19.1;
 - (f) take reasonable steps to resume message transmission via SWIFT communications as soon as practicable;
 - (g) submit a preliminary letter of explanation to the Service Provider within one business day after any of the event(s) in Rule 19.1, and a detailed report within two weeks of the event.

- 19.3 If the Service Provider is required to send any message using MASNET, physical electronic storage media, printouts, or (in the case of payments relating to the CLS system) tested fax, or CBCA, the Service Provider shall:
 - (a) inform the participants of its need to use MASNET, physical electronic storage media, printouts, tested fax or CBCA through telephone or any other possible means of communication;
 - (b) send messages to the participants using MASNET, physical electronic storage media, printouts, tested fax or CBCA according to the procedures and formats given in the MEPS+ Operations Manual and MEPS+ User Manuals respectively. The participant shall collect the physical electronic storage media from the Service Provider's premises at its own expense, when notified by the Service Provider;
 - (c) inform the participants when it is ready to resume SWIFT communications;
 - (d) take reasonable steps to resume message transmission via SWIFT communications as soon as practicable.
- 19.4 The participant shall comply with all terms, conditions and procedures specified in the MEPS+ Operations Manual relating to the use of manual backup facilities.

20. Disaster Recovery Facilities

- 20.1 Every participant shall maintain appropriate backup and disaster recovery facilities to resume the processing of payments and securities settlements within two hours of any event that hinders its ability to send or receive payments or securities settlements instructions to or from MEPS+.
- Where any event that hinders the ability of a participant to send or receive payments or securities settlement instructions to or from MEPS+ occurs, the participant shall:
 - (a) inform the Service Provider of that event, including the recovery of operations and activation of manual backup procedures (if any);

- (b) as a last resort, request the Service Provider to provide manual backup services if and when:
 - (i) its own efforts at restoring operations at both its production and disaster recovery sites have failed; or
 - (ii) it is not practicable for the participant to attempt to restore operations at its production or disaster recovery site (e.g. if the event occurs near the close of MEPS+ operating hours and the participant has only a few instructions to be transmitted in MEPS+);
- (c) update the Service Provider at least every thirty (30) minutes on the status of the event in Rule 20.1;
- (d) where necessary, request the Service Provider to extend the MEPS+ operating hours to complete its Transactions for the day, subject to the payment of the administrative fees set out in Schedule 4 to these Rules. The extension of the MEPS+ operating hours is provided at the Service Provider's discretion, and any extension of the MEPS+ operating hours shall not affect the cut-off time for cheque, IBG and FAST clearing and SGSMB transactions, but shall extend the MCB funding period correspondingly; and
- (e) submit a preliminary letter of explanation to the Service Provider within one business day after the event, and a detailed report within two weeks of the event.

21. Emergencies

21.1 In the event that, for any reason, the host system is shut down, or there is any interference with or interruption to the operation of MEPS+ due to any cause whatsoever, Transactions which would otherwise be carried out under MEPS+ shall be carried out by the Service Provider in accordance with Offline Contingency Modules or such procedures and facilities as the Service Provider may from time to time or at the material time by written notices provide, and the participant or participants concerned shall comply with such notices.

22. Furnishing information

- The Service Provider may, from time to time and at any time, require any participant to furnish any information pertaining to any transaction executed or to be executed, or settled or to be settled, under MEPS+, or pertaining to the operation of MEPS+ or the participation of that participant in MEPS+, and the participant concerned shall furnish the information accordingly.
- A participant which furnishes any information pursuant to Rule 22.1 shall ensure that such information is correct and accurate.

23. Intellectual property protection

- 23.1 Intellectual property rights, including copyright, design and patent rights, in all application software used in connection with MEPS+ (including manual backup facilities specified in Rule 19) shall be and remain inviolable at all times, and no participant shall, without the written consent of the Service Provider:
 - (a) modify or make a copy of any such software;
 - (b) transfer, sell, lease or license any such software to another person;
 - (c) apply or use any such software for purposes other than MEPS+ unless permitted by these Rules; or
 - (d) permit or suffer any other person in its employment or otherwise under its control to do any of the above.

24. Exemptions from requirements in respect of member institutions

- Where a participant is a member institution, the Service Provider may issue to such participant a letter providing that certain provisions in these Rules shall not apply to such participant.
- A letter issued by the Service Provider under Rule 24.1 may be subject to such terms and conditions as the Service Provider considers appropriate, and all other participants shall be notified by the Service Provider of the issuance of such a letter, together with any terms and conditions that may have been imposed.

25. Computer output evidence

- Where in any action, suit or proceeding between the Service Provider and a participant, computer output is tendered by the Service Provider as to any message or instruction transmitted or any Transaction executed or settled under MEPS+, or as to any computer software used in the host or SWIFT CBT, including the Relationship Management Application, SWIFT certificates, digital signatures and security software, or as to the operation of any such computer software in MEPS+, the participant and the Service Provider hereby expressly agree by this Rule that neither the authenticity nor the accuracy of the contents of the computer output shall be disputed for the purposes of the Evidence Act (Cap. 97).
- Where in any action taken by the Service Provider under these Rules, computer output is tendered by the Service Provider as to any message transmitted or any Transaction executed or settled under MEPS+, or as to any computer software used in the SWIFT CBT, including the Relationship Management Application, SWIFT certificates, digital signatures and security software, or as to the operation of any such computer software, all participants and the Service Provider hereby agree that such computer output shall be admissible in the action and no participant shall dispute the authenticity or the accuracy of the contents of the computer output.

26. Suspension of provision of MEPS+ Services

The provision of MEPS+ Services to a participant may be suspended by MAS pursuant to the terms of the Agreement. Upon the suspension of the provision of any or all of the MEPS+ Services to a participant, all pending, queued, forward-dated Transactions from or to the affected participant at the point of suspension, subject to Rule 26.3, shall be cancelled by the host computer. The Service Provider shall transmit messages indicating the status of each Transaction through the host computer to the affected participant.

- Subject to Rule 26.3, all new Transactions initiated by the affected participant after the suspension of the provision of any or all of the MEPS+ Services to such participant shall be rejected by the host computer.
- In the event of the suspension of the provision of any or all of the MEPS+ Services to a participant, the following Transactions may be accepted and processed by the host computer:
 - (a) IFT transactions between the affected participant and MAS, including IFT transactions effected by MAS on behalf of a non-participant to the affected participant; and
 - (b) redemption of matured SGSMB held in the affected participant's SGSMB account.

Rule 9.7

REGULAR OPERATING HOURS FOR MEPS+

(a) For weekdays:

Time	System Status
9:00:00 a.m 7:00:00 p.m.	System accepts Transactions

Rule 11.1

To: The Service Provider of MEPS+ Services

AUTHORISATION TO DEBIT A	ND CREDIT RTGS ACCOUNT
We,	, hereby request
and authorise you to debit and credit	our RTGS account maintained / to be opened* with you in FAST clearing figures as provided by the Clearing House.
	aid, we hereby agree that you shall not be bound to verify ny settlement advice and we hereby release and discharge claims we may have against you.
Authorised Signature:	Authorised Signature:
Name:	Name:
Designation:	Designation:
Date:	
* Delete as appropriate	

Rule 11.10

ADMINISTRATIVE FEES PAYABLE BY DEFAULTING MEMBER BANKS

- (a) For mid-day cheque or FAST transactions clearing, respectively:
 - (i) if the default sum is less than \$10 million, the administrative fee is \$5,000;
 - (ii) if the default sum is \$10 million or more, but less than \$30 million, the administrative fee is \$7,500; and
 - (iii) if the default sum is \$30 million or more, the administrative fee is \$10,000.
- (b) For end-of-day cheque or IBG transactions clearing:
 - (i) if the aggregate default sum is less than \$10 million, the administrative fee is \$10,000;
 - (ii) if the aggregate default sum is \$10 million or more, but less than \$30 million, the administrative fee is \$15,000; and
 - (iii) if the aggregate default sum is \$30 million or more, the administrative fee is \$20,000.
- (c) For end-of-day FAST transactions clearing:
 - (i) if the default sum is less than \$10 million, the administrative fee is \$10,000;
 - (ii) if the default sum is \$10 million or more, but less than \$30 million, the administrative fee is \$15,000; and
 - (iii) if the default sum is \$30 million or more, the administrative fee is \$20,000.

(d) The "default sum" referred to in (a), (b) and (c) above means the net debit figure of the		
member bank at the commencement of the relevant funding period.		

Rule 20.2

ADMINISTRATIVE FEES PAYABLE BY A PARTICIPANT WHICH REQUESTS FOR EXTENSION OF MEPS+ OPERATING HOURS

The fee for extension of operating hours shall be calculated as follows:

Length of extension	Fee
For the first hour or part thereof	\$1,000
Every subsequent half-hour or part thereof	\$500

APPENDIX 2 FEES AND CHARGES

Fees and Charges for MEPS+ Participation and Usage

1. Annual Subscription Fee

1.1 The annual subscription fees are collected in advance on 1 Apr of each year, or on any other dates as the Service Provider may specify.

Participant category	Annual Fee
Local banks (i.e. OCBC, DBS, UOB)	\$16,000
Foreign full banks that are	\$13,000
(i) accorded qualifying full bank privileges; or	
(ii) related to a non-participant which has been	
accorded with qualifying full bank privileges	
Full Banks	\$7,500
Wholesale Banks	\$2,000
Offshore Banks	\$750
Clearing and settlement system participants	\$2,000

1.2 In this Appendix, section 6 of the Companies Act (Cap. 50) will apply in determining whether parties are related to each other.

2. Transaction Charges

2.1 Transaction charges comprise message charges, which are charged when messages are sent or received by Participants, and time block charges, which are charged only when Transactions are settled in MEPS+. System-generated payments on behalf of participants such as EOD account sweep, Cheque/IBG/FAST settlement and SGSMB transaction payments are not charged. Details are as follows:

Message Charges	Cost
For every MT202 sent by the Participant or by the	\$1.70
Service Provider on behalf of the Participant	
For every MT103/MT103+ sent by the Participant or	\$1.70
by the Service Provider on behalf of the Participant	
For every MT940/941/942/950 sent to the Participant	\$0.30
For every MT527 sent by the Participant or by the	\$1.70
Service Provider on behalf of the Participant	
For every MT542 sent by the Participant or by the	\$1.70
Service Provider on behalf of the Participant	
For every MT541/543 sent by the Participant or by the	\$1.70
Service Provider on behalf of the Participant	
For every MT535/536/537 sent to the Participant	\$0.30

Time Block Charges	Cost
For every Transaction settled on or before 14:30	\$0.00
For every Transaction settled on or before 16:00	\$0.35
For every Transaction settled on or before 17:30	\$1.20
For every Transaction settled after 17:30	\$4.10

3. <u>Manual Contingency Charges</u>

3.1 The following charges are applied when the Participant requests for Transactions to be effected through MASNET, physical electronic storage media or manual key-in. Note that these charges are in addition to the message and time block charges above.

Manual Contingency charges	
Activation fee per day (for both MASNET, physical	\$100
electronic storage media and manual key-in)	
Backup charge per message (for MASNET, physical electronic storage media and manual key-in)	\$3.55
Manual key-in charge per message (for manual key-in	\$35.00
only)	

4. MEPS+ Test Environment Charges

4.1 The following charges are applied when the Participant requests to use the MEPS+ Test environment for Participant's own testing.

Request for MEPS+ Test Environment	Cost
One time setup cost	\$500
Maintenance / Support cost per day	\$200

5. Third Party Charges and Fees

- 5.1 The Service Provider has entered into an agreement with the Society for Worldwide Interbank Financial Telecommunication SCRL ("SWIFT") for SWIFT to configure and operate the SWIFT messaging services so as to support the access by Participants to MEPS+ Services.
- 5.2 The Participant shall reimburse the Service Provider for all charges and fees that are levied on the Participant from time to time by SWIFT and paid by the Service Provider on behalf of the Participant in relation to the services provided by SWIFT.

6. <u>Debiting of Fees and Charges</u>

Fees and charges (including administrative charges payable by a Participant under Rule 11.10 or 20.2 of the Operating Rules) shall be debited from the Current Account of Participants on the 7th of every calendar month for charges incurred in the preceding calendar month, except for those who have made alternative billing arrangements with the Service Provider. If the 7th is a public holiday, the deduction shall be carried out on the next business day immediately following. Participants shall maintain sufficient funds in their Current Account to cover the fees and charges (including administrative charges payable by a Participant under Rule 11.10 or 20.2 of the Operating Rules) to be deducted. Participants shall ensure that their MCB requirement, if applicable, is met at the end of the business day on which the deduction is made. A bill shall be transmitted via MEPS+ to all Participants on the first business day of every calendar month, notifying Participants of charges and fees incurred for the calendar month before.

APPENDIX 3 ACCESS CRITERIA

Access Criteria for MEPS+ Participation

Any person intending to become or to remain as a Participant of MEPS+ shall be required to meet the conditions set out below:

- (a) The person, at the point of its application to become a Participant of MEPS+, has been assessed by the Service Provider to be of sound financial standing;
- (b) The person shall be approved by MAS to participate in MEPS+ under section 29A of the Monetary Authority of Singapore Act (Cap. 186);
- (c) The person shall be properly licensed, approved or registered in accordance with the requirements set out in the relevant legislation or requirement (whether imposed in Singapore or outside Singapore) relating to the business that is undertaken by that person, and its license, approval or registration should not be subject to suspension or revocation. In the case where the person is not supervised by MAS, that person shall be adequately supervised by a competent authority in the country where the person is established or licensed;
- (d) The person shall be able to fulfill its financial obligations as and when they fall due and shall not be in arrears in the payment of fees and charges to the Service Provider;
- (e) The person shall hold a SWIFT membership and have the necessary hardware, software, systems and capability to send or receive messages or instructions to or from any other Participant using the SWIFT network;
- (f) The person shall have put in place appropriate disaster recovery facilities to meet the requirements as stated in Rule 20 of the MEPS+ Operating Rules.

APPENDIX 4 MANUAL BACKUP FACILITIES PROCEDURES

Manual Backup Facilities Procedures

A. Manual Contingency

- 1. A participant shall prepare its IFT and SGSMB instructions and bundle them in separate files (one file for IFT instructions and another file for SGSMB instructions), and compute the hash values for its IFT and SGSMB files according to the procedures and formats specified in the MEPS+ Operations Manual and MEPS+ User Manuals.
- A participant who requires information on the balance in its RTGS Account or SGSMB in its SGSMB account shall include such message into the file for IFT instructions or SGSMB instructions respectively.
- 3. A participant shall encrypt and zip the IFT and SGSMB files and their corresponding hash files before submitting to the Service Provider.
- 4. A participant shall submit its encrypted IFT and SGSMB files and hash files via MASNET or physical electronic storage media, and the Manual Contingency Control Form (signed by at least two authorized signatories) via facsimile to the Service Provider by 1830hours or (in the case of access to Intra-day Liquidity Facility) 1500hours. A participant is allowed to submit a maximum of two encrypted IFT files (and its corresponding hash files) and two SGSMB files (and its corresponding hash files) per day, or such other number of files as may be agreed in writing with the Service Provider.
- 5. The Service Provider reserves the right to reject any of the participant's files if:
 - a) the Manual Contingency Control Form is missing;
 - b) the Manual Contingency Control Form is illegible, incomplete or incorrect;
 - c) the signatories on the Manual Contingency Control Form do not match those in Service Provider's records:
 - d) the Manual Contingency Control Form is sent from an unauthorised fax number;
 - e) the Manual Contingency Control Form and/or the password to decrypt the zipped file is sent to the incorrect MAS fax or via other means not consulted with and approved by MAS;
 - f) the IFT and SGSMB files and corresponding hash files are not encrypted and zipped;
 - g) the encrypted and zipped file is sent from an unauthorised MASNET address;
 - h) the encrypted and zipped files are sent to the incorrect MAS MASNET mailbox or via other means not consulted with and approved by MAS;
 - i) the password to decrypt the zipped file does not match;
 - j) the hash file accompanying the transaction file is missing;
 - k) the hash values do not match;

- alterations on the Manual Contingency Control Forms are not countersigned by the authorized signatories; or
- m) the participant did not adhere to the procedures and formats specified in the MEPS+ Operations Manual and MEPS+ User Manuals for submission of the files for preparation of the IFT and SGSMB files.
- 6. A participant may access the Intra-day Liquidity Facility by submitting the Request For Intraday Liquidity form (signed by at least two authorized signatories) and hand-delivering the form to the Service Provider by 1500hours.

B. Manual Input

- A participant shall submit its IFT and SGSMB instructions (consolidated by counterparty) to the Service Provider by 1830hours using SWIFT MT199 or the Manual Input Form SGD Payments (signed by at least two authorized signatories) for IFT instructions or the Manual Input Form SGSMB Transactions for SGSMB instructions (collectively referred to as "Manual Input Forms").
- 2. A participant shall inform its counterparties of the breakdown and details of each IFT or SGSMB instruction.
- 3. The Service Provider reserves the right to reject any of the participant's instructions if:
 - a) the Manual Input Forms are illegible, incomplete or incorrect;
 - b) the signatories on the Manual Input Forms do not match those in Service Provider's records; or
 - c) alterations on the Manual Input Forms are not countersigned by the authorized signatories.
- 7. A participant may submit the "Request For MEPS+ Intraday Messages/Positions" form (signed by at least two authorized signatories) to request the Service Provider for its statement of account ("Intraday Statement Request") and hand-delivering the form to the Service Provider by 1800 hours. A participant is allowed to submit a maximum of four (4) Intraday Statement Request per day (two for its RTGS Account and two for its SGS Account), or such other number of Intraday Statement Request as may be agreed in writing with the Service Provider. The Intraday Statement Request shall be submitted by 1800hours.

C. Manual Input (in the case of payments relating to the CLS system)

1. A participant shall generate and manage the test keys according to the procedures and formats specified in the MEPS+ Operations Manual.

- 2. A participant shall submit its payment to the Service Provider using SWIFT MT199 or the Manual Input Form SGD Payments (CLS Transactions Only) (signed by at least two authorized signatories) via tested fax.
- 3. A participant shall submit its payments to the Service Provider by the cut-off times which CLS Bank International may by notice in writing determine, and obtain confirmation from the Service Provider that it has received the SWIFT MT199 or Manual Input Form SGD Payments (CLS Transactions Only).
- 4. The Service Provider reserves the right to reject any of the participant's payments if:
 - a) the Manual Input Form SGD Payments (CLS Transactions Only) is illegible, incomplete or incorrect;
 - b) the signatories on the Manual Input Form SGD Payments (CLS Transactions Only) do not match those in Service Provider's records; or
 - c) alterations on the Manual Input Forms SGD Payments (CLS Transactions Only) are not countersigned by the authorized signatories.

D. CBCA (in the case of payments relating to the CLS system)

- 1. CLS Bank International shall submit its payment to the Service Provider via CBCA and obtain confirmation from the Service Provider that it has received the payments.
- 2. The Service Provider reserves the right to reject any of CLS Bank International's payments if:
 - a) the payments are signed with the incorrect digital signature;
 - b) the digital signature is missing; or
 - c) CLS Bank International did not adhere to the procedures and formats specified in the MEPS+ Operations Manual and MEPS+ User Manuals for submission of the payments.