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MAS

Monetary Authority of Singapore

**SECURITIES AND  
FUTURES ACT (CAP. 289)**

**GUIDELINES ON THE  
REGULATION OF  
CLEARING FACILITIES**

10 OCTOBER 2016

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## **1 PURPOSE OF THESE GUIDELINES**

1.1 These Guidelines on the Regulation of Clearing Facilities (“Guidelines”) are issued by the Monetary Authority of Singapore (“MAS”) pursuant to section 321 of the [Securities and Futures Act \(Cap. 289\)](#) (“SFA”). These Guidelines aim to provide financial market participants with a better understanding of how MAS will administer the legislative provisions relating to clearing facilities in Part III of the SFA.

1.2 These Guidelines should be read in conjunction with the provisions of Part III of the SFA and the [Securities and Futures \(Clearing Facilities\) Regulations 2013](#) (“SF(CF)R”), and where relevant, other provisions of the SFA.

1.3 The Guidelines on the Regulation of Clearing Facilities issued on 1 July 2005 are revoked.

## 2 OBJECTIVES OF REGULATION OF CLEARING FACILITIES

2.1 Regulation of clearing facilities is an important component of MAS' financial supervision in Singapore. Clearing facilities that facilitate the clearing or settlement of capital markets transactions play a critical role in fostering stability in the financial system and the broader economy.

2.2 As set out in section 47 of the SFA, MAS' objectives in the regulation of clearing facilities are –

- (a) to promote safe and efficient clearing facilities; and
- (b) to reduce systemic risk.

2.3 These objectives are aligned with MAS' objectives of supervision as set out in the ["Objectives and Principles of Financial Supervision in Singapore" Monograph](#) and the ["Supervision of Financial Market Infrastructures in Singapore" Monograph](#). MAS' regulation of clearing facilities is also in line with the [Principles for Financial Market Infrastructures \("PFMI"\)](#).

2.4 The following paragraphs provide guidance on the key concepts encapsulated in MAS' regulatory objectives with respect to clearing facilities.

### **Safety**

2.5 A safe clearing facility is one where risks to its operations are well-managed, thereby minimising the possibility of market disruptions, and allowing financial market participants to discharge their obligations on a timely basis. This, in turn, fosters market confidence and maintains stability in the financial markets.

2.6 The safe operation of a clearing facility requires a comprehensive identification of risks that arise within the clearing facility or through interdependencies with other participants, as well as the ability to assess and effectively manage such risks. Examples of these risks include, but are not limited to, legal, credit, liquidity, general business, custody, investment and operational risks.

2.7 If the clearing facility fails to properly manage its risks, it may seize up financial flows, undermine the fulfilment of obligations and transmit shocks from one financial institution to another. This would threaten the stability of the financial markets, and

the broader economy. Given the importance of safety in preserving financial stability, MAS seeks to ensure the safe design and operation of clearing facilities through regulation.

### **Efficiency**

2.8 An efficient clearing facility ensures that there is effective use of resources when it performs its functions. Such a clearing facility would keep costs reasonable while maximising the economic benefits of financial intermediation. The design and operation of an efficient clearing facility requires a thorough understanding of its cost structures and the needs of the participants and markets it serves.

2.9 If the clearing facility is inefficient, its participants and their customers may be adversely impacted. For example, transaction costs facing participants could increase, or participants could face frequent disruptions to the clearing and settlement services provided by the clearing facility, affecting their ability to discharge their obligations on a timely basis. Consequently, they may choose to use an alternate arrangement other than central clearing, which poses increased risks to the financial system and the broader economy. In view of such potential adverse impact, MAS regulation seeks to ensure that clearing facilities operate efficiently.

### **Systemic risks**

2.10 Clearing facilities act as key nodes in the financial system, providing services that underpin significant financial activities. If not properly managed, these clearing facilities may cause widespread disruptions to the financial market and potentially undermine stability or public confidence in the financial system.

2.11 The extent of the disruptions arising from the failure of a clearing facility corresponds to the level of systemic risks posed by the clearing facility. For example, a clearing facility that clears or settles high volumes of transactions, or has a large network of participants, would have a higher contagion impact should it fail. In addition, the clearing facility may cause greater disruption where, in the event of its failure, participants face difficulties in accessing alternative clearing facilities.

2.12 MAS accordingly imposes regulatory requirements that are commensurate with the level of systemic risks posed by a clearing facility, thereby promoting its safe and efficient functioning and maintaining stability in the financial markets.

### 3 SCOPE OF REGULATION OF CLEARING FACILITIES

3.1 Clearing facilities that offer clearing or settlement services are required to be regulated by MAS. A clearing facility refers to any form of infrastructure that is set up to carry out clearing or settlement of transactions in securities, futures contracts or derivatives contracts.

#### Clearing or settlement

3.2 Clearing or settlement, as defined in Part II of the First Schedule to the SFA, comprises the chain of activities that immediately follows the execution of transactions between transacting parties to the point where the obligations of the transacting parties are discharged. The four main categories of activities in the chain are set out below. MAS sees these four main categories of activities as complementary, with each playing a distinct role in the chain of clearing or settlement activities.

- (a) *Verification of trade details* – information relating to the terms of transactions are verified by a clearing facility with a view to confirming the transactions

This refers to the process of post-trade verification of trade details by the clearing facility, with transacting parties agreeing on the terms of the transactions.

- (b) *Substitution of credit through novation or otherwise* – parties to transactions substitute, through novation or otherwise, the credit of the clearing facility for the credit of the parties

This refers to the clearing facility performing the role of a central counterparty (“CCP”), becoming the buyer to every seller and the seller to every buyer, and thereby ensuring the performance of open contracts. The CCP becomes counterparty to trades, usually through the process of novation.

“Novation” refers to a process through which the original obligation between a buyer and seller is discharged and replaced by two new

contracts, one between the CCP and the buyer, and the other between CCP and the seller. Another process by which a clearing facility may perform the role of a guarantor is the “open offer” process, in which a CCP extending the “open offer” is interposed in a transaction at the moment the buyer and seller agree on the terms and executes the trade.

- (c) *Calculation of obligations* – the obligations of transacting parties are calculated by the clearing facility, whether or not such calculations include multilateral netting arrangements

This refers to the calculation of obligations by a clearing facility to determine the obligations of the transacting parties to deliver or pay on the settlement date. Such calculations may take into account multilateral netting arrangements, resulting in net obligations. This process could also include the calculation of margin calls for open positions of the transacting parties.

- (d) *Settlement of obligations* – the clearing facility facilitates the meeting of obligations of transacting parties, including delivery or payment obligations

This refers to a clearing facility providing an arrangement, process, mechanism or service to facilitate the settlement of obligations between transacting parties. The clearing facility may facilitate the transfer of funds between transacting parties, or the physical delivery of a commodity. In particular, a securities settlement system (“SSS”) is a clearing facility that enables securities to be transferred and settled between transacting parties. However, it is not the intent of MAS to include within the definition of “clearing or settlement” the activities of persons that merely carry out instructions to make payments or transfer securities.

3.3 MAS is mindful of activities that do not give rise to regulatory concerns but fall within the regulatory scope of Part III of the SFA. Certain functions such as the back office operations of parties to the transactions as well as custodial activities are specifically excluded from the definition of the term “clearing or settlement” in the SFA. MAS is also empowered to exclude any other arrangement, process, mechanism

or service by way of prescription via from the definition of the term “clearing or settlement” in the SFA.

### **Location of clearing facility**

3.4 Section 339 of the SFA extends the jurisdiction of the SFA to activities which are partly or wholly carried out outside of Singapore, but could have a substantial and foreseeable effect in Singapore. A person operating a clearing facility outside of Singapore which falls within the scope of section 339 of the SFA will be subject to MAS’ regulation under Part III of the SFA.

3.5 The [Guidelines on the Application of Section 339 \(Extra-territoriality\) of the Securities and Futures Act](#) set out the general principles underlying how MAS would apply section 339 of the SFA to relevant provisions in the SFA. In relation to Part III of the SFA, for an act to fall within the scope of section 339(2), the effect of the act in Singapore would have to be both substantial and reasonably foreseeable. MAS considers section 339(2) to apply to a corporation operating a clearing facility carrying out activities wholly outside Singapore (“foreign clearing facility”) in the following scenarios:

- (a) when the clearing facility admits or intends to admit clearing participants (“clearing members”) based in Singapore;
- (b) when the clearing facility solicits or intends to solicit Singapore-based end clients (e.g. through publication of advertisements or information directed at end clients in Singapore);
- (c) when the clearing facility provides or intends to provide clearing or settlement services to an approved exchange (“AE”) or Singapore-incorporated recognised market operator (“RMO”); or
- (d) when the clearing facility facilitates or intends to facilitate the compliance by persons in Singapore with mandatory clearing obligations under Part VIB of the SFA.

3.6 Foreign corporations may be recognised by MAS as RMOs under Part II of the SFA (“foreign RMO”). A foreign clearing facility may be providing clearing or settlement services to a foreign RMO. Such a foreign clearing facility is considered to be carrying



out clearing or settlement services in a manner incidental to the operations of the foreign RMO. In such a case, it is not MAS' policy intent to regulate both the foreign RMO and the foreign clearing facility. Generally, MAS deems it sufficient to achieve its regulatory objectives through the regulation of the foreign RMO. However such a foreign clearing facility would still have to consider if the scenarios set out under paragraph 3.5 apply to it.

3.7 Regulation 53 of the SF(CF)R also provides that section 339(2) shall not apply to foreign clearing facilities (which are operating wholly outside Singapore) which have established clearing linkages with a clearing facility in Singapore under certain circumstances. Such foreign clearing facilities are not subject to regulation under Part III of the SFA.

3.8 The “clearing linkage” referred to in regulation 53 of the SF(CF)R is generally an arrangement between clearing facilities where either of the following two main characteristics is present:

- (a) some integration exists between the clearing systems of the linked clearing facilities e.g. a clearing linkage exists where two or more clearing facilities operate a common clearing platform or infrastructure used by the clearing facilities and their members; or
- (b) as a result of an arrangement between clearing facilities, the positions of a member of one clearing facility may be held at another clearing facility e.g. a clearing linkage exists where a position held by a member of a clearing facility may be transferred to another clearing facility and thereafter held at that clearing facility.

3.9 There may be forms of clearing linkages where –

- (a) the integration between the systems of the linked clearing facilities is not significant;
- (b) the positions of members and customers of the clearing facility in Singapore held at the linked foreign clearing facility are not significant; and
- (c) the linked foreign clearing facility –

- (i) is willing and able to cooperate with MAS by providing information and such other assistance as may be required;
- (ii) has its head office in a jurisdiction with a comparable regulatory regime, and where MAS has entered into adequate arrangements for mutual cooperation with the home supervisor of the clearing facility; and
- (iii) has in place adequate arrangements with the Approved Clearing House (“ACH”) or Recognised Clearing House (“RCH”)<sup>1</sup> for the supervision of corporations that clear or settle transactions on both linked clearing facilities.

3.10 For example, a clearing linkage, which is set up through the establishment of communication protocols between the existing systems of the clearing facilities, will not be considered to involve significant integration. As another example, a clearing linkage will not be considered to involve significant positions in a case where positions are held at a foreign clearing facility by virtue of an arrangement between the linked clearing facilities, but –

- (a) the open interest at that linked clearing facility outside of Singapore is not significant vis-à-vis the positions held at the clearing facility in Singapore; or
- (b) the volume of transactions cleared or settled by the clearing facility in Singapore, in respect of contracts whose positions are held at that linked foreign clearing facility, is not significant.

3.11 The forms of clearing linkages that fall within the circumstances set out under paragraph 3.9 are not likely to lead to material impact on the risks to a clearing facility in Singapore. In such cases, section 339(2) of the SFA will not apply to the linked foreign clearing facility, and the foreign clearing facility will not be subject to regulation under Part III of the SFA.

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<sup>1</sup> Clearing facilities are authorised by MAS either as an ACH or RCH. Please refer to Section 4 on the Regulatory Regime for Clearing Facilities for more information.

## **4 REGULATORY REGIME FOR CLEARING FACILITIES**

4.1 Clearing facilities play an important role in reducing systemic risks and maintaining the stability of the financial markets. MAS adopts an authorisation approach, where all clearing facilities operating in Singapore are subject to MAS regulation.

### **Criteria for authorisation of a clearing facility**

4.2 Under the authorisation approach, any person intending to engage in clearing or settlement can only do so if it is a corporation authorised either as an ACH or RCH by MAS. In determining whether a Singapore corporation<sup>2</sup> should be authorised as an ACH or RCH, MAS would consider whether the clearing facility is systemically important, as well as other relevant factors.

4.3 As set out in regulation 8 of the SF(CF)R, in determining the systemic importance of a clearing facility, MAS may take into account the following factors:

(a) size and structure of the clearing facility

Consideration includes factors such as the volume and value of transactions cleared, the amount of collateral held at the clearing facility, and the number of participants and investors served. The larger the scale of factors, the more likely the clearing facility is deemed systemically important.

(b) nature of the services provided by the clearing facility

Considerations include the type and range of clearing or settlement services that the clearing facility provides. The clearing facility may pose varying levels of systemic risks depending on the nature of services that it provides. In line with the PFMI, all clearing facilities performing the function of a CCP or SSS, as described in paragraph 3.2 (b) and (d), are deemed to be systemically important.

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<sup>2</sup> "Singapore corporation" refers to a corporation which is incorporated in Singapore.

- (c) nature of the transactions cleared by the clearing facility

Considerations include the specific type (e.g. shares, options and swaps) and the range of products that are cleared by the clearing facility. The wider the range of these products that fall within the scope of the SFA, the more likely that the clearing facility is systemically-important.

- (d) nature of the investors or participants who may use or have an interest in the clearing facility

Considerations include the level of sophistication of investors or participants and the impact of a failure of the clearing facility on them. For example, where participants are globally or domestically systemically important financial institutions, the impact of failure of the clearing facility on such participants may be high. As such, the clearing facility is more likely to be systemically important.

- (e) parties who may be affected in the event that the clearing facility runs into difficulties

Consideration includes the parties that may be affected in the event of disruptions to the functions of the clearing facility, such as the default of a participant or the failure of the clearing facility. For example, a corporation operating a clearing facility may be related to an existing ACH such that the failure of its clearing facility could adversely affect the ACH. Where significant parties may be affected in the event that the clearing facility runs into difficulties, the clearing facility is more likely to be systemically-important.

#### 4.4 Other relevant factors which MAS may take into account are:

- (a) whether the person operating the clearing facility is otherwise regulated by MAS under the SFA or any other written law

If the person operating the clearing facility is regulated under other Parts of the SFA or other written law administered by MAS, MAS will assess if its regulatory objectives can be achieved via the existing regulatory regime that the person is subject to.

(b) interests of the public

Consideration includes an assessment whether approving a clearing facility as an ACH may help to create efficiency gains or reduce systemic risk in Singapore's financial system, or support the development of Singapore's financial sector in other ways.

(c) any other circumstances that MAS may deem relevant.

MAS retains the flexibility to consider other circumstances. For example, in the case where a clearing facility provides clearing or settlement services for transactions that are executed on a market, MAS may consider the systemic importance of the market that the clearing facility serves, including whether the market is established in Singapore, and the number of clearing facilities that serve that market. For bilateral transactions, MAS may consider whether the clearing facility is the sole provider for the clearing or settlement for such types of transactions.

4.5 As mentioned in paragraph 4.3(b), a Singapore corporation that operates a CCP or SSS will be deemed systemically important and regulated by MAS as an ACH. For other Singapore corporations, MAS will assess its systemic importance using the abovementioned factors in deciding whether it should be regulated as an ACH or RCH.

4.6 A foreign corporation will be regulated by MAS as an RCH, subject to minimum requirements for recognition. The requirements are elaborated in the next section.

### **Minimum requirements for approval of ACH or recognition of RCH**

4.7 Section 50 of the SFA provides that a Singapore corporation may apply to MAS to be approved as an ACH or recognised as a RCH while a foreign corporation may apply to MAS to be recognised as a RCH. Specific requirements for approval as an ACH or recognition as an RCH are set out in regulation 7(1) and (2) of the SF(CF)R.

4.8 An applicant applying for approval as an ACH is required to demonstrate that –

- (a) it is able to meet the obligations of, and comply with the requirements imposed on an ACH; and
- (b) it is able to maintain a minimum base capital of at least \$10,000,000.

4.9 An applicant applying to be recognised as a RCH is required to demonstrate that –

- (a) it is able to meet the obligations of, and comply with the requirements imposed on a RCH; and
- (b) where it is a Singapore corporation, it is able to maintain a minimum base capital of at least \$5,000,000.

4.10 In the case of a foreign corporation, as set out in section 52(2) of the SFA, MAS would consider two key factors in granting recognition:

- (a) *whether adequate arrangements exists for cooperation between MAS and the primary financial services regulatory authority responsible for the supervision of the foreign corporation in the country or territory in which the head office or principle place of business of the foreign corporation is situated; and*

It is important for MAS to establish adequate cross-border arrangements with the home regulator of that foreign corporation, to deal with regulatory issues concerning that corporation. Such arrangements may provide for timely sharing of information, and effective cooperation in supervisory and enforcement activities.

- (b) *whether the foreign corporation is, in the country or territory in which the head office or principal place of business of the foreign corporation is situated, subject to requirements and supervision comparable, in the degree to which the objectives specified under section 47 of the SFA are achieved, to the requirements and supervision to which ACHs and RCHs are subject under the SFA*

MAS will, to the extent possible, place reliance on the home regulator's supervision of a foreign corporation. MAS will therefore examine whether the foreign regulatory regime is comparable to the regulatory regime in Singapore. The foreign regulatory regime will be deemed comparable if its regulatory requirements, oversight and supervision achieve similar objectives to the regulatory regime in Singapore.

In general, in terms of regulatory requirements, a foreign corporation may be considered as being subject to a comparable foreign regulatory regime where it –

- (i) is subject to requirements comparable to that under the SFA on a Singapore corporation conducting the same activities; and
- (ii) is able to maintain comparable base capital as, a Singapore corporation conducting the same activities.

In assessing the comparability of the foreign regulatory regime, MAS also takes into account whether the foreign regulator adopts the PFMI, and implements the PFMI in accordance with its responsibilities as set out in the PFMI.

4.11 In general, to demonstrate the applicant's ability to meet the statutory obligations and comply with the requirements imposed on an ACH or RCH, an applicant should have –

- (a) an established track record in the business or in a related business for at least the past five years;
- (b) key officers and directors with sufficient experience relevant to the operation of the business; and
- (c) documents that explain the ability of the applicant to comply with its statutory obligations, e.g. robust risk management practices and policies; sufficiency of financial, human, and system resources.

### **Application for and cancellation of ACH or RCH status**

4.12 All applications by corporations seeking to establish or operate clearing facilities in Singapore have to be submitted to MAS in accordance with regulation 6 of the SF(CF)R. In deciding whether to apply to be an ACH or RCH, a Singapore corporation should consider the criteria and minimum requirements set out in paragraphs 4.3, 4.7 and 4.8 above. Corporations are encouraged to engage MAS prior to the submission of their application.

4.13 In the event that an ACH or RCH intends to cease its operations, it may apply to MAS under section 55(1) of the SFA to cancel its status as an ACH or RCH. Pursuant to regulation 10 of the SF(CF)R, the application should be made in writing, and submitted to MAS at least 3 months before the ACH or RCH intends to cease its operations.



## 5 OBLIGATIONS OF APPROVED CLEARING HOUSES

5.1 The obligations of an ACH are set out in Division 2 of Part III of the SFA, which should be read in conjunction with Part III of the SF(CF)R. For an ACH performing the role of a CCP or SSS, MAS expects it to comply with the PFMI<sup>3</sup>. The detailed requirements of the PFMI are set out in the [Notice on Financial Market Infrastructure Standards](#) (“FMI Notice”) which should be read with the explanatory notes set out in the PFMI.

5.2 Pursuant to section 57 of the SFA, an ACH is required to comply with the following general obligations:

- (a) *operate a safe and efficient clearing facility;*

The ACH should conduct its business safely and efficiently, ensuring that its risks are well-managed and that there is effective use of its resources. To this end, the ACH should comprehensively identify risks to the clearing facility and be able to assess and effectively manage these risks. The ACH should also be able to meet the needs of its participants and any markets it serves while keeping costs reasonable.

- (b) *manage any risks associated with its business and operations prudently;*

The ACH is expected to –

- (i) ensure that adequate and appropriate systems and controls are in place to identify, assess, monitor and manage risks relating to its clearing or settlement business, in accordance with the PFMI;
- (ii) implement the [Guidelines on Outsourcing](#) to mitigate risks arising from outsourcing arrangements with external parties;
- (iii) comply with regulation 12(1) of the SF(CF)R, which obliges the ACH to seek the approval of MAS prior to making any changes to its risk management frameworks. Such changes to the risk

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<sup>3</sup> MAS’ adoption of the PFMI, and its approach in its supervision of FMIs in Singapore are set out in the [Monograph on the Supervision of Financial Market Infrastructures in Singapore](#).

management frameworks include changes to the types of collateral accepted, the methodologies for collateral valuation and the determination of margins to manage its risk exposure to its participants.

Approval is also required for changes to the size of the financial resources available to support a member default. Changes to the size of financial resources include circumstances such as –

- (A) changes in the total value of financial resources, or value of each tier of finance resource, available to the ACH to support a member default;
  - (B) changes in the form of each tier of financial resource; and
  - (C) any other changes that may affect the size or liquidity of financial resources available to the ACH.
- (iv) comply with regulation 12(1) of the SF(CF)R, which obliges the ACH to seek the approval of MAS prior to commencing any linkage, arrangement or cooperative arrangement referred to in regulation 11(3) of the SF(CF)R;
  - (v) ensure that adequate and appropriate emergency procedures and business continuity plans, as described in regulation 16 of the SF(CF)R, are in place. In drawing up such procedures and plans, the ACH should refer to the [MAS Business Continuity Management Guidelines](#). The ACH should conduct a periodic review and testing of its business continuity plans;
  - (vi) maintain a viable plan of action (also known as a recovery and resolution plan) which sets out the procedures and systems necessary to achieve a recovery or orderly wind-down of the ACH's operations if triggered in the event of financial stress, in accordance with regulation 17 of the SF(CF)R. The ACH should conduct a periodic review of the recovery and resolution plan;
  - (vii) ensure that its systems and controls for technology risk management are in accordance with the [Technology Risk](#)

[Management Guidelines](#), and that there is periodic testing or review of these systems and controls;

(viii) ensure that the ACH establishes appropriate and adequate controls, such as position limits. When determining breaches of position limits, the ACH should take into consideration the factors as set out under regulation 15 of the SF(CF)R;

(c) *in discharging its obligations under the SFA, not act contrary to the interests of the public, having particular regard to the interests of the investing public*

The ACH is obliged not to engage in practices that may be detrimental to the interests of the investing public.

(d) *ensure that access for participation in its clearing facility is subject to criteria that are fair and objective, and are designed to ensure the safe and efficient functioning of its facility and to protect the interests of the investing public*

The ACH is obliged to ensure that access for participation in its clearing facility is based on criteria that are fair, objective and publicly disclosed. The criteria should not be unnecessarily restrictive and access should not be limited other than on grounds of risks to the safe and efficient functioning of its clearing facility.

(e) *maintain business rules that make satisfactory provision for –*  
*(i) the clearing facility to be operated in a safe and efficient manner;*  
*and*  
*(ii) the proper regulation and supervision of its members*

The ACH is obliged to maintain business rules in compliance with regulation 29 of the SF(CF)R. This is further elaborated in Section 8 of these Guidelines.

- (f) *enforce compliance by its members with its business rules*

The ACH is obliged to have an adequate and appropriate surveillance and enforcement programme in place to effectively monitor members' compliance with its business rules, enforce its rules and discipline its members in a fair and objective manner.

- (g) *have sufficient financial, human and system resources –*

*(i) to operate a safe and efficient clearing facility;*

*(ii) to meet contingencies or disasters; and*

*(iii) to provide adequate security arrangements*

The ACH is obliged to give regard to the level of resources available to support the activities of its clearing facility in varying operating conditions, commensurate with the needs of its business and operations. For example, the ACH should consider the adequacy of officers with relevant experience, system resources and capacity to support ongoing and future operations.

- (h) *maintain governance arrangements that are adequate for the clearing facility to be operated in a safe and efficient manner*

The ACH is obliged to ensure that its governance arrangements are clear and transparent, to promote the safety and efficiency of the ACH and support the stability of the broader financial system. Such arrangements should be in accordance with the [Securities and Futures \(Corporate Governance of Approved Exchanges, Approved Clearing Houses and Approved Holding Companies\) Regulations 2005](#).

- (i) *ensure that it appoints or employs fit and proper persons as its chairman, chief executive officer, directors and key management officers.*

The ACH should ensure that its board and management contain suitable persons with the appropriate experience, skills and the integrity necessary to discharge their responsibilities. The ACH should take reference from the criteria set out in the Guidelines on Fit and Proper Criteria.

5.3 Apart from the ongoing general obligations as set out in paragraph 5.2, there are also notification obligations for the ACH. Pursuant to section 58(1) of the SFA and regulation 11(1) of the SF(CF)R, the ACH is obliged to notify MAS of specific circumstances and keep MAS updated on developments. Such circumstances include when there is a disruption or delay in any clearing or settlement procedures of the ACH, or settlement failure of a participant etc.

5.4 In addition, the ACH is also obliged to submit reports to MAS on a regular basis under regulation 14(1) of the SF(CF)R. These reports include, but are not limited to, the ACH's annual report, financial statements and self-assessment reports on how the ACH has discharged its responsibilities under the SFA.

5.5 Where appropriate, MAS may exempt any clearing facility operated by an ACH under section 57(3) of the SFA, from any of the obligations or provisions of the SFA, if MAS is satisfied that such exemption would not detract from its regulatory objectives.

## 6 OBLIGATIONS OF RECOGNISED CLEARING HOUSES

6.1 Singapore corporations that do not operate CCPs or SSSs, or that have been assessed not to be systemically-important, are generally regulated by MAS as RCHs. All foreign corporations are also regulated as RCHs. The obligations of a RCH are set out in Division 3 of Part III of the SFA, which should be read in conjunction with Part IV of the SF(CF)R.

6.2 Pursuant to section 75 of the SFA, an RCH is required to comply with the following general obligations:

*(a) operate a safe and efficient clearing facility;*

The RCH should conduct its business safely and efficiently, ensuring that its risks are well-managed and that there is effective use of its resources. To this end, the RCH should comprehensively identify risks to the clearing facility and be able to assess and effectively manage these risks. The RCH should also be able to meet the needs of its participants and any markets it serves while keeping costs reasonable.

*(b) manage any risks associated with its business and operations prudently;*

The RCH is expected to –

- (i) ensure that adequate and appropriate systems and controls are in place to identify, assess, monitor and manage risks relating to its clearing or settlement business, in accordance with the PFMI;
- (ii) in the case of a RCH that is a Singapore corporation, implement the [MAS Guidelines on Outsourcing](#) to mitigate risks arising from outsourcing arrangements with external parties;
- (iii) ensure that adequate and appropriate emergency procedures and business continuity plans, as described in regulation 38 of the SF(CF)R, are in place. In drawing up such procedures and plans, the RCH should refer to the [MAS Business Continuity Management Guidelines](#).

- (c) *in discharging its obligations under the SFA, not act contrary to the interests of the public, having particular regard to the interests of the investing public*

The RCH is obliged not to engage in practices that may be detrimental to the interests of the investing public.

- (d) *ensure that access for participation in its clearing facility is subject to criteria that are fair and objective, and are designed to ensure the safe and efficient functioning of its facility and to protect the interests of the investing public*

The RCH is obliged to ensure that access for participation in its clearing facility is based on criteria that are fair, objective and publicly disclosed. The criteria should not be unnecessarily restrictive and access should not be limited other than on grounds of risks to the safe and efficient functioning of its clearing facility.

- (e) *maintain business rules that make satisfactory provision for –*  
*(i) the clearing facility to be operated in a safe and efficient manner;*  
*and*  
*(ii) the proper regulation and supervision of its members*

The RCH should maintain business rules that make satisfactory provision for the clearing facility to be operated in a safe and efficient manner. The business rules should also provide for the regulation and supervision of members of the RCH, to facilitate the safe and efficient functioning of the clearing facility.

- (f) *enforce compliance by its members with its business rules*

The RCH is obliged to have an adequate and appropriate surveillance and enforcement program in place to effectively monitor members' compliance with its business rules, enforce its rules and discipline its members in a fair and objective manner.

- (g) *have sufficient financial, human and system resources –*
  - (i) *to operate a safe and efficient clearing facility;*
  - (ii) *to meet contingencies or disasters; and*
  - (iii) *to provide adequate security arrangements*

The RCH is obliged to give regard to the level of resources available to support the activities of its clearing facility in varying operating conditions, commensurate with the needs of its business and operations.

- (h) *maintain governance arrangements that are adequate for the clearing facility to be operated in a safe and efficient manner*

The RCH is obliged to ensure that its governance arrangements are clear and transparent, to promote the safety and efficiency of the RCH and support the stability of the broader financial system.

- (i) *ensure that it appoints or employs fit and proper persons as its chairman, chief executive officer, directors and key management officers.*

The RCH should ensure that its board and management contain suitable persons with the appropriate experience, skills and the integrity necessary to discharge their responsibilities. The RCH should take reference from the criteria set out in the MAS [Guidelines on Fit and Proper Criteria](#).

6.3 Apart from the ongoing general obligations as set out in paragraph 6.2, there are also reporting and notification obligations for the RCH under the SFA and the SF(CF)R. The RCH is obliged to notify MAS of circumstances as specified under section 76(1) of the SFA and regulation 34(1) of the SF(CF)R. Pursuant to regulation 36 of the SF(CF)R, the RCH is also obliged to submit to MAS its annual report on a yearly basis, and a business report and other reports as required.

6.4 Where appropriate, MAS may exempt any clearing facility operated by a RCH under section 75(3) of the SFA, from any of the obligations or provisions of the SFA, if MAS is satisfied that such exemption would not detract from its regulatory objectives.



## **7 CUSTOMERS' MONEY OR ASSETS HELD BY APPROVED CLEARING HOUSES**

7.1 Each ACH which holds customers' money or assets ("Customer Assets") as part of its clearing and settlement activities is required to ensure safekeeping of such money or assets. Customer Assets held in relation to securities and futures contracts are subject to slightly different arrangements from that held in relation to "specified transactions", which are defined in the SF(CF)R as derivatives contracts. Regulations 23 to 28 of the SF(CF)R provide for protection of Customer Assets by requiring clear identification, segregation, accounting, proper use and investment of such Customer Assets. An overview of these protections is set out below.

### **Identification of Customer Assets**

7.2 Pursuant to regulation 23(1)(b) of the SF(CF)R, an ACH is obliged to require its clearing members to notify the ACH if Customer Assets are paid for, or paid in relation to, a customer's contract.

7.3 In relation to specified transactions, an ACH is further obliged under regulation 23(1)(c) to require its clearing members to notify the ACH if the book of Customer Assets of a customer is to be kept separate from the books of other customers of that same member.

### **Segregation of Customer Assets**

7.4 Pursuant to regulation 23(2)(b) and (c), and 23(3)(b) and (c) of the SF(CF)R, upon receiving such notification from a clearing member, the ACH is required to segregate all Customer Assets from its own money and assets, as well as from members' money and assets. However, Customer Assets belonging to different customers of members of the ACH can be commingled in the same account.

7.5 For the purposes of bookkeeping, in relation to specified transactions, where an ACH is notified by a member under regulation 23(1)(c) to perform separate bookkeeping for a customer (see paragraph 7.3 above), the ACH is required to keep the books of Customer Assets of that customer separate from books of Customer Assets pertaining to any other customers of the ACH (such accounting henceforth identified as an "Individual Client Segregation Account").

7.6 In terms of bookkeeping for securities and futures contracts, under regulation 23(3)(d) of the SF(CF)R, the ACH is only required to keep the books of Customer Assets of one member separate from the books for Customer Assets of another member (such accounting henceforth identified as an “Customer Omnibus Account”).

### **Customer Assets held in trust**

7.7 Pursuant to regulation 23(2)(a) and 23(3)(a) of the SF(CF)R, all Customer Assets segregated by the ACH are required to be placed in a trust account held for the benefit of customers. Additionally, in accordance with the FMI Notice, an ACH is required to hold Customer Assets at regulated entities (i.e. banks or custodians) that have robust accounting practices, safekeeping procedures and internal controls that fully protect these assets.

7.8 To mitigate the risk that a default of a member holding Customer Assets would immediately result in the Customer Assets being frozen and not being accessible to the ACH during insolvency proceedings, regulation 23(4) of the SF(CF)R sets out that a member cannot be used by an ACH for the depositing of any Customer Assets of that member in its role as a bank or custodian.

### **Permissible use of Customer Assets<sup>4</sup>**

7.9 In the case of a “double default” scenario, whereby the default of a clearing member occurs as a result of a default of a customer of that member, Customer Assets held in a Customer Omnibus Account can be utilised to meet the obligations of the defaulting member, subject to the conditions set out in paras 7.11 and 7.12 below.

7.10 An ACH can declare a “double default” to have occurred as long as there was a shortfall in the customer’s books at the time of the member’s default, even if there had not been a margin call on the customer account.

7.11 Given that the risk that Customer Assets of non-defaulting customers in a Customer Omnibus Account may be applied towards a defaulting customer’s obligations, additional measures are imposed on an ACH in order to afford a certain level of protection to Customer Assets of non-defaulting customers.

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<sup>4</sup> Customer Assets which an ACH is permitted to use pursuant to regulation 24 of the SF(CF)R should not include money and assets which are held by the ACH in escrow for transacting parties and which the ACH has no claim or lien over.

7.12 In relation to Customer Assets which are held under the Customer Omnibus Account, an ACH is only allowed to use such Customer Assets belonging to non-defaulting customers after excess money and assets belonging to the member, including any excess money or assets paid to the ACH as collateral or guarantee for purposes of satisfying the member's obligation ("Excess House Resources") have been wholly utilised to close-out the defaulting customer's position. However, this does not preclude the porting of the Customer Assets of non-defaulting customers to another member before Excess House Resources are applied.

7.13 In relation to specified transactions where a clearing member has notified the ACH to account for Customer Assets to be kept in an Individual Client Segregation Account under regulation 23(1)(c) (see paragraph 7.3 above), pursuant to regulation 24(2) of the SF(CF)R, the ACH is not allowed to use Customer Assets belonging to that customer to meet the obligations of another customer who has defaulted. The ACH is also not permitted to use Customer Assets belonging to other non-defaulting customers to meet the obligations of a defaulting customer whose assets are held in accordance to the Individual Client Segregation Account.

### **Investment of Customer Assets**

7.14 In investing any Customer Assets, an ACH should abide by the principles of preserving principal and maintaining sufficient liquidity to meet the obligations of customers in setting out the classes of securities in which it may invest. In line with the PFMI, an ACH's investment strategy should also be consistent with its overall risk-management strategy and fully disclosed to its participants. Pursuant to Regulation 25(1), such classes of securities include Government securities, negotiable certificates of deposit and money market funds.

### **Verification and reconciliation of Customer Assets**

7.15 To ensure accountability of all Customer Assets, an ACH is required to perform various checks on the accounting procedures and safekeeping procedures of all Customer Assets:

- Daily computation of Customer Assets held by the ACH (Regulation 26 of the SF(CF)R);

- Bi-annual verification of Customer Assets deposited in ACH by auditors (Regulation 27 of the SF(CF)R);
- Regular reconciliation of Customer Assets with records submitted by members, in relation to specified transactions, where the ACH has been notified to account for Customer Assets for a customer in an Individual Client Segregation Account under regulation 23(1)(c) (see paragraph 7.3 above) (Regulation 28 of the SF(CF)R).

## **8 BUSINESS RULES OF APPROVED CLEARING HOUSES**

8.1 Section 66(1) of the SFA empowers MAS to prescribe the matters that an ACH shall make provision for in its business rules. The business rules of an ACH are in turn statutorily deemed to be a binding contract between the ACH and each participant under section 67(1) of the SFA thereby playing a key role in establishing the powers of the ACH and the obligations of its participants in the clearing and settlement process. This not only provides the legal basis and a high degree of certainty for actions taken by the ACH in the management of its risks, but also provides for clarity, transparency and enforceability in the operations of the ACH.

8.2 As set out in regulation 29 of the SF(CF)R, an ACH is required to make provision in its business rules to the satisfaction of MAS for the following:

*(a) admission of members, and continuing requirements for members*

The business rules of an ACH should make clear the criteria for participation in its clearing facility, which should be objective and risk-based. This allows for fair and open access to its services. The ACH should monitor compliance with these criteria on an ongoing basis.

Examples of such criteria include financial requirements applicable to the members of the ACH, the internal control and risk management procedures that members should put in place, as well as whether the members have the necessary resources to carry out those requirements.

*(b) the classes of products that may be cleared or settled on the clearing facility that it operates and the terms and conditions under which these products will be cleared or settled*

The business rules of the ACH should clearly disclose the classes of products that it clears or settles. Key procedures of the clearing or settlement process of the ACH should also be fully disclosed, to enable participants to have an accurate understanding of the risks they incur when participating in the ACH.

*(c) matters relating to risk*

The business rules of the ACH should clearly articulate the risk management tools that it has in place, and the obligations of its members in relation to such tools e.g. margin collections. Its business rules should provide a high degree of certainty for each material aspect of its activities. For example, the finality of settlement and the calculation (including netting) of obligations should be provided for in the business rules where relevant.

*(d) the handling of defaults*

The business rules of the ACH should include key aspects of its default rules and procedures, which includes the circumstances in which actions may be taken, who may take those actions, and the scope of actions to be taken e.g. the treatment of proprietary and customer positions.

The business rules should also set out the financial resources available to support the default of a member, including the forms of resources available and the order in which the different forms are available to the ACH.

*(e) the carrying on of business of the ACH with due regard to the interests and protection of the investing public*

In line with the obligation to ensure safe and efficient functioning of FMIs, the ACH should carry on its operations, by way of its business rules, in a manner that meets the needs of its participants while taking into consideration the interests and protection of the investing public.

### **Amendments to the business rules**

8.3 In regulation 23 of the SF(CF)R, an ACH which proposes to amend its business rules is required to consult its participants, unless the proposed amendment has a limited impact on its participants. When considering the impact that a proposed rule amendment would have on its participants, the ACH should consider the likely effect that the amendment would have on the rights, obligations, operations and systems of its various participants.

8.4 Generally, MAS also expects the ACH to consult the public on proposed amendments to the business rules that the ACH considers likely to affect the interests of the general investing public.

8.5 When undertaking a consultation, the ACH should provide potential respondents with a reasonable opportunity to comment on the proposed amendments, including providing an adequate period of notice and an appropriate avenue to provide feedback. When considering the length of period that should be provided to potential respondents, the ACH should take into account the complexity and impact of the proposed amendments. The ACH should generally provide a notice period of at least 10 business days, with longer periods for proposed amendments that are relatively more complex or are likely to have more impact.

8.6 Where the ACH has undertaken a consultation, it should provide MAS with a summary of the comments received together with its reasons for accepting or rejecting such comments when submitting a notification under regulation 30(1) of the SF(CF)R. This is in addition to the requirement under regulation 30(1)(a) to (c) of the SF(CF)R that the ACH notify MAS of the proposed amendment, the purpose and the proposed effective date of the proposed amendment.

8.7 Notification of the proposed amendment should be made to MAS at least 21 days before the date on which the proposed amendment is to take effect. MAS may, on its initiative or on the application of the ACH, allow an amendment to come into effect less than 21 days after it receives the notification of the proposed amendment.

8.8 To the extent reasonably possible, the ACH should allow for a reasonable period between the time it publishes the final text of the amendment and the effective date of the amendment. This would allow its participants to put in place any changes necessary to allow the participants to comply with the amended business rules. When considering the length of period that should be provided, the ACH should take into account the impact that the proposed amendment would have.

8.9 MAS recognises that there is a possibility that in urgent situations, an ACH may need to propose and bring into effect rule amendments within a very short period of time, in order for the ACH to maintain safe and efficient clearing facilities. In such situations, MAS may exercise its power to exempt the ACH from the requirement to consult its participants pursuant to section 81SB of the SFA.

## **9 CLEARING FEES OF APPROVED CLEARING HOUSES AND RECOGNISED CLEARING HOUSES**

9.1 MAS' objective is to promote the efficient pricing of key clearing and settlement services in a manner that facilitates fair access to these services. In most cases, this objective can be achieved through the operation of a competitive market, without the need for regulation. However, MAS may exercise its powers, under regulations 21 and 42 of the SF(CF)R, to require an ACH or RCH to obtain MAS' approval for its clearing fees. Such an ACH or RCH will be specified in Part I of the Third Schedule to the SF(CF)R and be subject to clearing fee regulation in respect of those classes of transactions listed in Part II of the Third Schedule.

### **Factors in determining application of regulations 21 and 42 of the SF(CF)R**

9.2 The factors that MAS may take into account in determining whether an ACH or RCH should be specified in Part I of the Third Schedule to the SF(CF)R, and hence be subject to regulations 21 and 42 of the SF(CF)R, include –

- (a) the level of competition in, or the contestability of –
  - (i) the market for clearing or settlement services provided by the ACH or RCH; or
  - (ii) where relevant, markets where the transactions cleared through the ACH or RCH are traded;
- (b) the ability of trading platforms, financial intermediaries or other service providers to establish or operate in Singapore without fair access to the clearing or settlement services provided by the ACH or RCH; and
- (c) the role of the ACH or RCH in Singapore's financial services industry e.g. whether the ACH or RCH is the sole or dominant provider of clearing or settlement services. An ACH or RCH may be considered the sole or dominant provider of clearing or settlement services if the clearing facility that it operates is necessary for the provision of financial services by trading platforms, financial intermediaries or other service providers, and such facility is so costly or difficult to replicate that a new trading



platform, financial intermediary or service provider would not be able to provide its services without fair access to such facility.

### **Fees requiring approval**

9.3 MAS recognises that an ACH or RCH may not be dominant in providing clearing or settlement services in every class of transactions. As such, MAS will only require clearing fees for classes of transactions specified under Part II of the Third Schedule to the SF(CF)R to be subject to approval.

9.4 An ACH or RCH that is subject to regulations 21 and 42 of the SF(CF)R is required to charge clearing fees approved by MAS for the service or services in respect of which it was approved. These clearing fees will be excluded from the application of the Competition Act 2006 (Cap. 50B) under paragraph 2 of the Third Schedule to the Competition Act, which excludes conduct to the extent to which it is engaged in order to comply with a legal requirement. For the avoidance of doubt, other fees that an ACH or RCH charges, or other conduct that it may undertake, which are not pursuant to compliance with a legal requirement will fall within the scope of application of the Competition Act and may be reviewed by the Competition Commission of Singapore (“CCS”).

### **Actions requiring approval**

9.5 MAS generally considers the following actions by an ACH or RCH specified in Part I of the Third Schedule to the SF(CF)R to require approval:

- (a) an introduction of a clearing fee;
- (b) an increase or decrease in the quantum of a clearing fee;
- (c) a change in the basis for calculating a clearing fee;
- (d) a levy of an additional fee for an activity or service whose cost or fee was previously covered or included in a clearing fee;
- (e) an inclusion of an additional service whose cost or fee was not previously covered or included in a clearing fee;

- (f) a removal of a service whose cost or fee was previously covered or included in a clearing fee; or
- (g) a rebate or discount from a clearing fee.

### **Criteria for approval**

9.6 Regulations 21(7) and 42(7) of the SF(CF)R set out general matters that MAS may take into account in determining whether to approve or refuse an application for approval of a clearing fee. In particular, MAS will consider the following matters:

- (a) *competition in the financial services industry of Singapore and access to clearing or settlement services in Singapore*

Clearing or settlement is an essential part of the process of executing a trade on a market, such as one for listed securities in Singapore. Industry players along the value chain, such as market operators and brokers, are likely to require access to clearing or settlement services in order to operate in Singapore. In accessing the effect of the proposed clearing fee on competition and access to clearing or settlement services, MAS may consider whether the clearing fee will –

- (i) be applied in a discriminatory manner that is not based on objective differences in the nature of the services provided;
- (ii) be applied in a manner that does not distinguish between services that are objectively different in nature;
- (iii) be predatory towards, or limit access to, the clearing or settlement services provided by competitors;
- (iv) be conditional on the acceptance by the purchaser of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of the contract; or
- (v) otherwise restrict, prevent or distort competition.

*(b) cost of providing the service referred to in the application*

MAS may take into account the cost of providing the service, including the cost of infrastructure investments necessary for the service. Factors that MAS may consider include the impact of the decision of MAS on the financial soundness of the ACH or RCH and whether the proposed clearing fee will –

- (i) be commensurate with reference to the cost of providing the service;
- (ii) enable the ACH or RCH to recover the cost of providing the service; and
- (iii) offer appropriate incentives to encourage future investments in clearing or settlement infrastructure.

*(c) cost and efficiency of trading, clearing and settlement in Singapore of the securities, futures contracts or derivatives contracts specified in Part II of the Third Schedule to the SF(CF)R*

MAS may assess the impact of the application on the cost and efficiency of trading, clearing and settlement in Singapore relative to that in comparable markets or clearing facilities. In so doing, MAS may take into account the scope, comprehensiveness and outcomes of any public or industry consultations undertaken by the ACH or RCH.

*(d) sound and progressive financial services sector.*

MAS may consider, more broadly, the effect of the clearing fee on the objective of MAS to foster a sound and reputable financial centre under section 4(1)(b) of the Monetary Authority of Singapore Act (Cap. 186).

### **Extension of period of review**

9.7 MAS may exercise its discretion under regulation 21(5) or 42(5) of the SF(CF)R to extend the period for the completion of its review up to 35 business days from the receipt of the completed application where MAS consults the CCS and any person or

representative of a person affected by the proposed fee. In determining whether to consult, the parties to consult and the mode of consultation, MAS may take into account the likely impact of the proposed fee. If more time is required for the review, MAS may extend the review period beyond 35 business days, but it will provide the ACH or RCH an opportunity to be heard prior to doing so.