



Monetary Authority of Singapore

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

**NOTICE ON CAPITAL REQUIREMENTS FOR APPROVED
EXCHANGES AND APPROVED CLEARING HOUSES**

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NOTICE ON CAPITAL REQUIREMENTS FOR APPROVED EXCHANGES AND APPROVED CLEARING HOUSES

PART 1: INTRODUCTION

1.1 This Notice is issued pursuant to section 45 and 81R of the Securities and Futures Act 2001 (“the Act”).

1.2 This Notice applies to any corporation that is an approved exchange or approved clearing house (each a “Specified Person”).

1.3 This Notice establishes the liquidity and solvency requirements for a Specified Person and the methodology which a Specified Person must use for calculating its liquid assets, eligible capital, liquidity resource requirement and total risk requirement for the purpose of its liquidity and solvency requirements.

1.4 This Notice shall take effect on [date].

PART 2: DEFINITIONS

2.1 The terms used in this Notice are defined in Annex 1.

2.2 Any expression used in this Notice shall, except where expressly defined in this Notice or unless the context otherwise requires, have the same meaning as in the Act.

PART 3: GENERAL REQUIREMENTS

3.1 A Specified Person must –

- (a) if it is an approved clearing house, at all times maintain a clearing fund that satisfies all the following conditions:
 - (i) The clearing fund must contain sufficient resources to meet any potential financial losses that may arise from a default of all entities in the Largest Loss Group and the Financially Weakest Members;
 - (ii) At least 25% of the clearing fund must be in the form of cash contributed by the approved clearing house, of which an amount

equivalent to at least 15% of the clearing fund must form the first tier of resources in the clearing fund;

- (iii) The resources contained in the clearing fund must be in the form of –
 - (A) cash;
 - (B) securities of the Government;
 - (C) debt securities of the government of a foreign country or jurisdiction, if the currency of that foreign country or jurisdiction is acceptable as margins by the approved clearing house;
 - (D) negotiable certificates of deposit; or
 - (E) money market funds;
- (b) not cause or permit its liquid assets to fall below its liquidity resource requirement as calculated in accordance with Part 4 of this Notice (called in this Notice “liquidity requirement”);
- (c) not cause or permit its eligible capital to fall below its total risk requirement as calculated in accordance with Part 5 of this Notice (called in this Notice “solvency requirement”); and
- (d) immediately notify the Authority if –
 - (i) its liquid assets or eligible capital fall below 120% of the respective requirement in sub-paragraph (b) and (c); or
 - (ii) it becomes aware that it will be unable to comply with sub-paragraph (a), (b) or (c), as applicable to it.

3.2 A Specified Person must put in place processes to monitor compliance with the requirements mentioned in paragraphs 3.1(a) to 3.1(c), as applicable to it, which take into consideration the following:

- (a) projected fluctuations in revenue and expenses, as a result of changes in type and volume of activities and risk exposures in the normal course of business and under a variety of adverse business scenarios;
- (b) projected current and future capital requirements in relation to its strategic objectives;
- (c) planned changes to equity over the next year;

- (d) anticipated extraordinary one-time losses.

3.3 A liquidity and solvency report mentioned in regulations 9(1)(f) of the Securities and Futures (Organised Markets) Regulations 2018 (“SF(OM)R”) must include calculations of the liquid assets, base capital, eligible capital, liquidity resource requirement, and total risk requirement of the approved exchange.

3.4 A liquidity and solvency report mentioned in regulations 14(1)(f) of the Securities and Futures (Clearing Facilities) Regulations 2013 (“SF(CF)R”) must include calculations of the liquid assets, base capital, eligible capital, liquidity resource requirement, total risk requirement, and clearing fund resources, including resources contributed by the approved clearing house.

3.5 A capital plan mentioned in regulations 9(1)(g) of the SF(OM)R and regulation 14(1)(g) of the SF(CF)R must reflect the considerations specified in paragraph 3.2 of this Notice.

PART 4: LIQUIDITY REQUIREMENT

Overview

4.1 A Specified Person must calculate its liquid assets and liquidity resource requirement in accordance with paragraphs 4.2 to 4.5, unless otherwise specified by the Authority by notice in writing to the relevant Specified Person concerned.

Calculation of the liquidity resource requirement

4.2 A Specified Person must calculate its liquidity resource requirement as the higher of –

- (a) 50% of its annual operating expenses; or
- (b) the amount which the Specified Person has assessed is needed to achieve recovery or an orderly wind-down.

Calculation of liquid assets

4.3 A Specified Person must calculate its liquid assets as the sum of –

- (a) cash and cash equivalents;
- (b) debentures of the Government;
- (c) negotiable certificates of deposit; and
- (d) money market funds;

less the sum of items mentioned in paragraph 5.2(i) and (j), where applicable.

4.4 For the purposes of paragraph 4.2 and subject to paragraph 4.5, “annual operating expenses” means:

- (a) the total operating expenses as stated in –
 - (i) where the Specified Person is an approved exchange, its latest financial statement submitted pursuant to regulation 9(1)(a)(i) of the SF(OM)R (called in this paragraph and paragraph 4.5, “financial statement”);
 - (ii) where the Specified Person is an approved clearing house, its latest annual report submitted pursuant to regulation 14(1)(a)(i) of the SF(CF)R (called in this paragraph and paragraph 4.5, “annual report”); and
- (b) any lease payments that have been made in the financial year for which the financial statement or annual report was submitted, to the extent that such payments are not included in the total operating expenses mentioned in paragraph (a);

less the sum of –

- (c) expense items that are not incurred from the ordinary activities of the Specified Person and are not expected to recur frequently or regularly¹ (as stated in the financial statement or annual report); and
- (d) depreciation and amortisation expenses as stated in the financial statement or annual report.

4.5 Where the financial statement or annual report (as the case may be) is not available or the Specified Person fails to submit such statement or report within the time prescribed, or such longer time as permitted by the Authority, under regulation 9(1)(a)(i) of the SF(OM)R or regulation 14(1)(a)(i) of the SF(CF)R (as the case may be), the Specified Person must consult with the Authority on the appropriate values to be used for the purpose of calculating its annual operating expenses.

4.6 For the purpose of paragraph 4.3, “cash equivalent” means any deposit placed with a banking institution or deposit-taking institution, or any cheque, draft or other item drawn on a banking institution or merchant bank that is either payable immediately upon presentation or that is in the process of collection.

¹ This may include costs from one-time events such as write-offs, purchases of or losses from the sale of the Specified Person’s fixed assets, or extraordinary events such as earthquakes or other natural disasters.

PART 5: SOLVENCY REQUIREMENT

Overview

5.1 A Specified Person must calculate its eligible capital and total risk requirement in accordance with paragraphs 5.2 to 5.6, unless otherwise specified by the Authority by notice in writing to the relevant Specified Person concerned.

Calculation of the eligible capital

5.2 A Specified Person must calculate its eligible capital as the sum of the following items in the latest available accounts of the Specified Person –

- (a) base capital;
- (b) paid-up irredeemable and cumulative preference share capital;
- (c) paid-up redeemable preference share capital which is –
 - (i) in respect of any redeemable preference share which has a redemption period of not less than 2 years from the point when the preference share is issued and paid-up, and
 - (ii) subject to a maximum limit of 100% of its base capital;
- (d) revaluation reserves;
- (e) other disclosed reserves; and
- (f) interim unappropriated profit,

less the sum of the following items in the latest available accounts of the Specified Person –

- (g) intangible assets;
- (h) future income tax benefits;
- (i) cash committed as contributions to the clearing fund, pursuant to paragraph 3.1(a), in the case of an approved clearing house;
- (j) resources committed, in its business rules or equivalent, as resources committed to absorb losses arising from custody and investment of its members' collateral placed with it, in the case of an approved clearing house;
- (k) the full amount of regulatory capital deficits in its subsidiaries that are regulated financial institutions, and pro-rata share of regulatory capital

deficits in its associated corporations that are regulated financial institutions subject to paragraph 5.7;

- (l) capital investments in any financial institution which is incorporated in Singapore (excluding capital investments in any associated corporation or subsidiary that is included in the calculation of paragraph 5.3(b));
- (m) pre-paid expenses;
- (n) charged assets, except to the extent that the Specified Person has not drawn down on the credit facility if the charge is created to secure a credit facility;
- (o) unsecured loan and advances; and
- (p) treasury shares, if they are not already excluded from the base capital of the Specified Person.

Calculation of the total risk requirement

5.3 A Specified Person must calculate its total risk requirement as the sum of the following items in the latest available accounts of the Specified Person –

- (a) operational risk requirement, calculated as 50% of its annual operating expenses; and
- (b) investment risk requirement, calculated as the sum of –
 - (i) 100% of capital investments in every associated corporation or subsidiary; and
 - (ii) 10% of the value of any investments undertaken by the Specified Person that involves the use of its own capital (giving rise to the risk of loss of that capital) and that is not included in (i); and
- (c) general counterparty risk requirement, calculated as the sum of 8% of each risk-weighted counterparty exposure².

5.4 For the purposes of paragraph 5.3 and subject to paragraph 5.5, “annual operating expenses” means:

- (a) the total operating expenses as stated in –
 - (i) where the Specified Person is an approved exchange, its latest financial statement submitted pursuant to regulation 9(1)(a)(i) of

² i.e. 8% x counterparty risk weight x counterparty exposure

the SF(OM)R (called in this paragraph and paragraph 5.5, “financial statement”);

- (ii) where the Specified Person is an approved clearing house, its latest annual report submitted pursuant to regulation 14(1)(a)(i) of the SF(CF)R (called in this paragraph and paragraph 5.5, “annual report”); and

less the sum of –

- (b) expense items that are not incurred from the ordinary activities of the Specified Person and are not expected to recur frequently or regularly³ (as stated in the financial statement or annual report).

5.5 Where the financial statement or annual report (as the case may be) is not available or the Specified Person fails to submit such statement or report within the time prescribed, or such longer time as permitted by the Authority, under regulation 9(1)(a)(i) of the SF(OM)R or regulation 14(1)(a)(i) of the SF(CF)R (as the case may be), the Specified Person must consult with the Authority on the appropriate values to be used for the purpose of calculating its annual operating expenses.

Counterparty risk weight and credit grades

5.6 For the purpose of paragraph 5.3(c), a Specified Person –

- (a) must calculate counterparty risk requirements only for its own assets that gives rise to a counterparty exposure;
- (b) must include all positive counterparty exposures without offsetting against negative counterparty exposures to the same counterparty;
- (c) must assign the counterparty exposure to a credit quality grade and the corresponding counterparty risk weight in accordance with Annex 2;
- (d) need not include the counterparty exposure for cash and non-cash collaterals deposited by clearing members or participants, that arise from the Specified Person’s clearing and settlement activities;
- (e) need not include the counterparty exposure for any assets that are accounted for under the Investment risk requirement in paragraph 5.3(b);
- (f) need not include the counterparty exposure for any assets that has been deducted in the computation of eligible capital in paragraph 5.2.

³ This may include costs from one-time events such as write-offs, purchases of or losses from the sale of the Specified Person’s fixed assets, or extraordinary events such as earthquakes or other natural disasters.

5.7 For the purpose of 5.2(k), in the event that a recapitalisation plan is in place, or an irrevocable commitment has been given by other shareholders to make up the regulatory capital deficit in an associated corporation that is a regulated financial institution, the Authority may approve a corresponding reduction in the amount of deductions in respect of such regulatory capital deficits.

DEFINITIONS

associated corporation	has the meaning given by regulation 2 of the Securities and Futures (Corporate Governance of Approved Exchanges, Approved Clearing Houses and Approved Holding Companies) Regulations 2005
base capital	has the meaning given by – (a) regulation 6(3) of the Securities and Futures (Organised Markets) Regulations 2018, in the case of an approved exchange; and (b) regulation 7(3) of the Securities and Futures (Clearing Facilities) Regulations 2013, in the case of an approved clearing house;
capital investments	means all exposures of a capital nature, including – (a) any ordinary share; (b) any preference share; (c) any instrument treated as capital used by any regulated financial institution to meet any capital requirement of the Authority or a foreign regulatory authority; (d) any lending on non-commercial terms or which is not at arms' length; and (e) any guarantee issued to third parties for the benefit of subsidiaries on non-commercial terms or which is not at arms' length;
charged asset	means an asset which is subject to a charge under which a third party has a right of retention or sale of the asset upon default of the Specified Person;
financial institution	has the meaning given by section 2 of the Financial Services and Markets Act 2022;

<p>financially weakest members</p>	<p>means the two lowest ranking members as determined by the following ranking methodology:</p> <p>(a) identify and exclude, members who have a credit rating of ‘A’ and above from an external credit assessment institution, or whose holding company (whether immediate or otherwise) –</p> <p>(i) has a credit rating of ‘A’ and above from an external credit assessment institution; and</p> <p>(ii) has, group shareholders’ equity of at least S\$500 million;</p> <p>(b) rank all remaining members not mentioned in sub-paragraph (a) based on each of their free financial resources;</p>
<p>foreign regulatory authority</p>	<p>means an authority of a foreign country or jurisdiction, exercising any function that corresponds to a regulatory function of the Authority under the Monetary Authority of Singapore Act 1970 or any of the written laws set out in the Schedule to that Act;</p>
<p>free financial resources</p>	<p>means financial resources net of any capital requirements imposed by the Authority or a foreign regulatory authority;</p>
<p>Group Potential Losses</p>	<p>means the potential financial losses, which an approved clearing house will be exposed to, in the event of a simultaneous default of the positions entered into by all entities in a Member Group, net of margins required to be applied against such financial losses;</p>
<p>interim unappropriated profits</p>	<p>means any unappropriated interim profit where, in the 12-month period immediately preceding –</p> <p>(a) every quarterly financial statement was prepared using the same accounting policies and practices applied in the preparation of the year-end financial statements (except for any change in the accounting policy or practice arising from a requirement in any written law);</p>

	<p>(b) every quarterly financial statement and every significant transaction was reviewed in a timely manner by an external auditor; and</p> <p>(c) the external auditor did not express a qualified opinion on any of the quarterly financial statements;</p>
irredeemable and non-cumulative preference share capital	<p>means preference share capital consisting of preference shares that satisfy all of the following requirements:</p> <p>(a) the principal of the shares is perpetual;</p> <p>(b) the shares are not callable at the initiative of the issuer of the shares or the shareholders, and the principal of the shares is never repaid outside of liquidation of the issuer, except in the case of a repurchase or other manner of reduction of share capital that is initiated by the issuer and permitted under written law; and</p> <p>(c) the issuer has full discretion to cancel dividend payments, and –</p> <p>(i) the cancellation of dividend payments is not an event of default of the issuer under any agreement;</p> <p>(ii) the issuer has full access to cancelled dividend payments to meet its obligations as they fall due; and</p> <p>(iii) the cancellation of dividend payments does not result in any restriction being imposed on the issuer under any agreement, except in relation to dividend payments to ordinary shareholders;</p>
Largest Loss Group	means the Member Group which has the largest Group Potential Losses;
Member Group	means a group comprising a member of the approved clearing house and its related corporations;

regulated financial institution	<p>a financial institution, or a person who –</p> <p>(a) carries on any business which, if carried on in Singapore, would be regulated as a financial institution; and</p> <p>(b) is regulated by a foreign regulatory authority;</p>
regulatory capital deficit	means any shortfall in a corporation's capital in meeting any capital requirements, imposed by the Authority or a foreign regulatory authority.

ANNEX 2**CREDIT QUALITY GRADE AND COUNTERPARTY RISK WEIGHT**

Credit Quality Grade	1	2	3	4	5	6	Unrated
Risk Weight	0%	20%	50%	100%	100%	150%	50%
Fitch Ratings	AAA AA+ AA AA-	A+ A A-	BBB+ BBB BBB-	BB+ BB BB-	B+ B B-	CCC+ CCC CCC- CC C D	-
Moody's Investors Services	Aaa Aa1 Aa2 Aa3	A1 A2 A3	Baa1 Baa2 Baa3	Ba1 Ba2 Ba3	B1 B2 B3	Caa1 Caa2 Caa3 Ca C	-
Standard & Poor's Ratings Services	AAA AA+ AA AA-	A+ A A-	BBB+ BBB BBB-	BB+ BB BB-	B+ B B-	CCC+ CCC CCC- CC C D	-