

## Bermuda Monetary Authority

## **GUIDANCE NOTES**

on the Maintenance of Capital, Net Assets and Liquidity

July 2022

Note: This document should be read in conjunction with the Investment Business (Prudential Standards) (Standard Licences, Test Licences, and Class A Registered Persons) (Capital, Net Assets and Liquidity) Rules 2022.

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## I. INTRODUCTION

- 1. These Guidance Notes (GN) have been issued by the Bermuda Monetary Authority (Authority or BMA) to provide guidance for investment providers and prospective applicants regarding the provisions of section 10A of the Investment Business Act 2003 (Act), and the Investment Business (Prudential Standards) (Standard Licences, Test Licences, and Class A Registered Persons) (Capital, Net Assets and Liquidity) Rules, and the supervisory process the Authority will apply.
- 2. The Authority's Guidance is of general application and seeks to consider the wide diversity of undertakings that may be licensed or registered under the Act. The GN will be kept up to date and revised versions are published from time to time. The Authority cannot provide definitive interpretation of the provisions of the Act since that is the prerogative of the Courts. However, the Authority, in administering the Act, is prepared to offer its own views on the meaning of provisions.
- 3. It should be noted that the Authority has also published a Statement of Principles (SoP) and codes as provided for under the Act. The SoP provides guidance on the Authority's approach in interpreting the minimum criteria and in exercising its power to grant, revoke or restrict a licence or registration and in exercising its power to obtain information and reports and to require production of documents. The codes of conduct provide guidance on the duties, requirements, procedures, standards and sound principles to be observed by persons carrying on investment business. Copies of these documents can be found on the Authority's website (www.bma.bm).

# II. GUIDANCE IN RESPECT OF PARAGRAPH 3: ASSESSMENT AND CALCULATION OF MINIMUM NET ASSETS

- 4. Investment providers are expected to closely monitor their net asset positions. Without prejudice to the minimum requirements set out in paragraph 3 of the Rules, each investment provider should maintain net assets of such scale and in such form as to safeguard the interests of clients and potential clients, having regard to:
  - a) The risks inherent in the investment business;
  - b) The risks inherent in any operations of related entities so far as they are capable of affecting the institution;
  - c) Any other factors that appear to the Authority to be relevant.
- 5. In assessing the sufficiency of net assets, the Authority may require reasonable assurance that resources are genuinely available to support the investment provider's business. Accordingly, the Authority may seek to be satisfied in its assessment of net assets that, among other things, claims on third parties are fully recoverable in the normal course of business.
- 6. In calculating net assets, all claims on other members of a group to which an investment provider belongs should be deducted, unless the Authority has separate regulatory responsibility for monitoring the capital adequacy of the connected party or is in a position to assess capital adequacy for the wider group.

- 7. In determining net assets for the purposes of paragraph 3 of the Rules, the following amounts will also generally be deducted, since they do not represent capital available to the investment provider:
  - a) Investments in subsidiaries;
  - b) Investments in associates; and
  - c) Intangible assets.
- 8. Where an investment provider is a partnership, the Authority will assess its minimum net asset requirement in respect of balances in each partner's capital accounts, net of outstanding borrowing from the investment provider. In the case of a sole trader, or an unincorporated entity that is not a partnership, the Authority will generally seek to satisfy itself that the stipulated minimum net asset figure is, and will remain, freely available to support the investment business and to meet any losses that may be incurred.

## III. GUIDANCE IN RESPECT OF PARAGRAPH 5: THE MARKET RISK BASED CAPITAL REQUIREMENT

- 9. Further to the circumstances provided for in paragraph 5(1) of the Rules, the Authority may require an investment provider to maintain additional capital, beyond the static minima provided for in paragraph 3 of the Rules. In such instances, the Authority may, based on its assessment of those circumstances, either:
  - a) Require an investment provider to maintain net assets of a fixed amount greater than those prescribed in paragraph 3 of the Rules; or
  - b) Require an investment provider to maintain minimum capital equal to or exceeding 8% of total Risk Weighted Assets (RWA), calculated in accordance with the market risk based methodology set out in the attached Appendix 1.
- 10. Notwithstanding the method determined by the Authority, the minimum amount of net assets to be maintained by any investment provider that is required to hold additional capital, is \$250,000.
- 11. Regulatory capital is classified according to its quality and ability to absorb losses. Tier 1 capital should be of such quality and amount to absorb losses when the entity remains a going concern and should be immediately available to absorb losses, as they occur. Tier 2 capital should be available to absorb losses when the entity is no longer a viable going concern or is a gone concern. In the case of Tier 2 instruments, such instruments are limited to a maximum of 50% of Tier 1 capital.
- 12. Assets that generally cannot be relied upon during periods of stress to be converted to cash to fund losses must be deducted from Tier 1 capital. The most common types of assets deducted from Tier 1 capital are goodwill and other intangible assets, deferred tax assets and investments in other financial entities.

## IV. GUIDANCE IN RESPECT OF PARAGRAPH 7: MAINTENANCE OF ADEQUATE LIQUIDITY

- 13. The Authority expects all licensed investment providers will employ appropriate means to closely monitor their liquidity positions to ensure that they are always able to meet their obligations as they become due.
- 14. Notwithstanding the minimum amounts prescribed in paragraph 7(2) of the Rules, each licensed investment provider should monitor its liquidity position on an ongoing basis, having regard to, inter alia:
  - a) The relationship between its liquid assets, and both actual and contingent liabilities;
  - b) The due dates for maturity of assets and liabilities;
  - c) The nature, scale and risks inherent in its operations; and
  - d) Any other factors that may reasonably appear to be relevant.
- 15. Assets are considered to be liquid if they can be easily converted to cash within a reasonable period, where such period does not exceed 30 days. The Authority may, to such extent as it considers appropriate, consider as liquid assets, in addition to the assets of the investment provider, any facilities available to it that, in the Authority's view, can provide liquidity within a reasonable period. The Authority would classify certain committed standby facilities, for example, as liquid assets.
- 16. Without prejudice to the other types of instruments outlined in paragraph 6 of the Rules as generally counting towards liquid assets, the Authority will generally require:
  - a) For receivables arising from the sale of investments outstanding for less than 30 days from the contractual settlement date, that if the debtor is outstanding for more than 30 days from the contractual settlement date, the amount should be written down to the lower of book or market value;
  - b) For other receivables arising from investment business and that have been outstanding for less than two months, such amounts may be included where, for example, they represent:
    - i. Amounts due from connected companies that are adequately secured and are repayable within 60 days;
    - ii. Unsecured amounts due at the request of the company; and
    - iii. Any other circumstances that the Authority may deem to be reasonable.
- 17. Where they are desirous of including an asset that is not listed in paragraph 6 of the Rules, investment providers must receive prior written consent from the Authority to do so.

## V. GUIDANCE IN RESPECT OF PARAGRAPH 8: REQUIREMENTS FOR CLASS A REGISTERED PERSONS

18. Where Class A Registered Persons are not required to maintain a minimum amount of liquid assets, the Authority nonetheless expects, consistent with the requirement in the minimum criteria for business to be conducted in a prudent manner, that such persons

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will maintain sufficient liquidity at all times to ensure that they are able to meet liabilities when they become due.

#### APPENDIX 1: ADDITIONAL GUIDANCE FOR REPORTING IN RESPECT OF THE MARKET RISK BASED CAPITAL REQUIREMENT

- 1. Notwithstanding the fundamental differences between investment providers as against banks and credit institutions, depending on the nature of their activities, there may be considerable overlap of the risks posed and faced by some investment firms, when compared to banks and credit institutions. For that reason, the Authority may determine, in specific circumstances, that the methodology underpinning the Basel Committee on Banking Supervision's Basel III (Basel) capital adequacy framework is generally more suitable than a static minimum net asset requirement for application to particular investment providers, to better approximate and account for the complexities of risks undertaken in their operations.
- 2. This appendix will apply to any investment provider that the Authority requires to maintain a market risk based capital requirement. It is based on the Basel framework's standardised methodology for assessment of RWA for on- and off-balance sheet exposures, and provides guidance on proper reporting for the different tiers of regulatory capital to ensure that exposures are supported by capital of sufficient quality and quantity, on an ongoing basis.
- 3. The Basel framework recognises that a minimum level of capital must be maintained by an entity to cover identified risk exposures. The framework recognises that different types of capital are higher quality than others and different exposures have higher risk than others. A minimum level of capital is set as a percentage of RWA, which includes both on-balance sheet and off-balance sheet assets and exposures. RWAs can be calculated for:
  - a) Credit risk;
  - b) Market risk; and
  - c) Operational risk.

Market risks are further sub-divided into the following five additive components:

- a) Equity position risk;
- b) Interest rate position risk;
- c) Foreign exchange position risk;
- d) Commodities position risk; and
- e) Option position risk.
- 4. The implementation of this approach starts by implementing a standardised assessment of RWA for on- and off-balance sheet exposures, and application of a minimum notional capital requirement for credit, market and operational risk (e.g., 8%).

The RWA will be calculated such that in the case of market risk and operational risk, the total RWA is determined by multiplying the calculated notional capital requirements by 12.5 (i.e., the reciprocal of the minimum notional capital ratio, such as 8%) and adding the resulting figures to the sum of the RWA for credit risk.

The proposed minimum regulatory capital limit set as a percentage of RWA (e.g., 8%) comprises only the Pillar 1 elements from the Basel framework which are typically structured such that Common Equity Tier 1 (CET1) capital must be a minimum percentage of RWA at all times (e.g. 4.5%) and Tier 1 (T1) capital also at a minimum percentage of RWA at all times (e.g., 6%).

- 5. This guidance should be read in conjunction with the following documents:
  - a) The Revised Framework for Regulatory Capital Assessment 2008 (Policy);
  - b) Guidance on Completion of the Prudential Information Return for Banks 2008; and
  - c) Basel III for Bermuda Banks 2017.
- 6. The Authority recognises that even in instances where it is generally appropriate to apply the Basel framework to specific investment providers, it may be necessary to make limited adjustments, to account for the nature of each investment provider's specific business circumstances and risk profile. In those instances, the Authority is prepared to exercise appropriate flexibility, to ensure that investment provider's specific risks and activities are properly accounted for by the framework.

#### **APPENDIX 2: PRUDENTIAL INFORMATION RETURN INSTRUCTIONS**

#### I. CREDIT RISK

Based on the nature of an investment provider's business, the following standardised credit risk categories are deemed generally applicable:

#### On – balance sheet exposures

- Cash
- Claims on Sovereigns and Multilateral Development Banks (MDB)
- Claims on Public Sector Entities (PSE)
- Claims on Corporates
- Claims on Banks and Securities Firms
- Securitisations

Other Balance Sheet Exposures

## *Off – balance sheet exposures*

All to be included based on the nature of an investment provider's business.

## Structure of the PIR template

## Total column

Report the sum, in US dollars, at current book value (i.e., current outstanding amount including accrued interest and net of any specific provision or associated depreciation).

## CRM column

Report here Credit Risk Mitigation (CRM). CRM refers to techniques the reporting institution may use to mitigate credit risk and hence reduce the capital requirement of a credit exposure. Where an asset is not covered by any recognised CRM techniques, the amounts reported before CRM and after CRM will be the same. Four types of CRM techniques are recognised for this purpose: collateral, netting, guarantees and credit derivatives.

To be recognised, a CRM technique should satisfy the relevant operational requirements as set out in paragraphs 79 to 84 of the Revised Framework for Regulatory Capital Assessment<sup>1</sup>. Under the standardised approach, there are two methods that can be used for recognising the impact of collateral. Institutions must choose between the "simple" and "comprehensive" approaches and use that chosen method exclusively.

Netting, guarantees and credit derivatives are always handled using the same approach, being the "comprehensive" approach for netting and the "simple" approach for guarantees and credit derivatives.

## Total after CRM column

<sup>&</sup>lt;sup>1</sup> Located at the following link <u>https://www.bma.bm/document-centre/policy-and-guidance-banking</u>

This column is equal to "Total" column less "CRM" column. In cases where CRM techniques cannot be used to reduce the credit risk associated with an asset, the exposure amount after CRM to be reported in this column will equate to the exposures before CRM amount.

#### Risk Weight column

Risk weights are generally stated in the Prudential Information Return (PIR) in accordance with the weightings detailed in Revised Framework for Regulatory Capital Assessment<sup>2</sup>.

#### Risk Weighted Assets (RWA) column

Generally, the RWA is a derived field in the template, calculated by multiplying total exposures after CRM by risk weight. In some cases, however, the RWA must be entered manually. The RWA amount for some asset types may consist of several discrete asset exposures, each potentially attracting different risk weights.

For counterparty credit risk in trading assets, institutions are required to calculate their counterparty credit risk charge for over-the-counter derivatives, repo-style and similar transactions, separate from the capital charge for general market risk and specific risk. The risk weights to be used must be consistent with those used for calculating the capital requirements for non-trading assets. Thus, institutions must be consistent in using the standardised approach for both trading and non-trading assets.

#### **Recognised External Credit Assessment Institutions**

The Authority has recognised the External Credit Assessment Institutions (ECAI) set out in Exhibit I for use by institutions under the standardised approach for credit risk, as well as within the securitisation framework for credit risk.

<sup>&</sup>lt;sup>2</sup> Located at the following link <u>https://www.bma.bm/document-centre/policy-and-guidance-banking</u>

## Specific guidance for credit risk section:

Credit risk – On balance sheet portion

Cash

Item	Description of	Guidance
	item	
100.1	Notes and coins	Notes and coins are allocated a risk weight of 0%.
100.2	Gold and precious metals	Gold is allocated a risk weight of 0%. However, the treatment of other precious metals (silver, platinum and palladium) should be discussed with the Authority.

Claims on	sovereigns an	d Multilateral	Development	Banks (MDB)
cranns on	sovereigns and		Deretopment	

Item	Description	Guidance	Guidance					
	of item							
110.1 t 110.5	o Claims on sovereigns and MDBs	Claims on the Government of Bermuda that are both denominated and funded in Bermuda or US dollars are allocated a lower-risk weight–one category lower than the applicable weighting. Claims on other sovereigns (overseas central governments) should be weighted based on ratings assigned by eligible ECAI or country risk scores. See Exhibit Table 2 for country risk scores. The generic mapping for claims on sovereigns is as follows:						
		Credit assessment	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-	Not rated
		Risk weight	0%	20%	50%	100%	150%	100%
110.6	High Quality MDBs	High quality MDBs qualify for 0% weighting. See listing of high quality MDBs on paragraph 31 of Revised Framework for Regulatory Capital Assessment <sup>3</sup> . In the case of other MDBs, risk weights reflect external credit assessments, as for banks, but with no preferential treatment for short term claims.						

## Claims on Public Sector Entities (PSEs)

Item	Description	Guidance
	of item	

<sup>&</sup>lt;sup>3</sup> Located at the following link <u>https://www.bma.bm/document-centre/policy-and-guidance-banking</u>

120.1 120.4	to	Claims on Bermuda PSEs	Claims on E category les Government seek the Auth to any PSE. O in accordance	s favour of Bermu ority's ap Claims or	rable th uda, and proval be n Bermue	an the reporting efore alloo da PSEs s	weighting institutio cating a ri should be	g of the ns should sk weight weighted
			as follows: Credit assessment Risk weight	AAA to AA- 20%	A+ to A- 50%	BBB+ to BBB- 100%	BB+ and below 150%	Not rated 150%
120.1 120.4	to	Claims on foreign PSEs	Claims on for than where the concerned per and that se arrangements	the super rmits "on upervisor	rvisory a le categoi ry auth	uthority ry less fav ority ap	in the ju vourable" plies su	risdiction

## Claims on corporates

Item		Description	Guidance					
		of item						
130.1 130.6	to	Claims on corporates	Claims on o companies sh Table 1. No claim on preferential to The generic r	unrated of that assi	weighted corporate gned to it	may be the sovereig	dance wit given a ri	th Exhibit sk weight
			Credit assessment	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to BB- and Not rated	Below BB-
			Risk weight	20%	50%	75%	100%	150%
			Where an ins its corporates The Authorit adopted and a	s at 100% y require	6 withou	t regard	to externa	al ratings.

Item	Description	Guidance						
	of item							
140.1	Maturity more than 3 months	column in Ex The generic r	Claims should be weighted in accordance with the relevant column in Exhibit Table 1. The generic mapping is as follows:					
		Credit	AAA	A+	BBB+	BB+	Below	
		assessment	to AA-	to A-	to BBB-	to B-	В-	rated
		Risk weight	20%	30%	50%	100%	150%	*See below*
		The unrated 150% depend C, respective	ling on v	-		-		
140.2	Maturity less than 3	Claims shoul column in Ex	hibit Ta	ible 1.		ordance	e with th	e relevant
	months	The generic r		; is as f		г – т		
		Credit	AAA	A+	BBB+	BB+	Below	Not
		assessment	to AA-	to A-	to BBB-	to B-	В-	rated
		Risk weight	20%	20%	20%	50%	150%	*See below*
		The unrated 150% depend C, respective	ling on v	•		-		

Claims on banks and securities firms

## Securitisations

Item	Description	Guidance				
	of item					
150.1 to 150.4	Securitisatio n	Claims on se with Exhibit adjustments: 350% (ii) B+ Where an iss weighted in a Credit assessmen t	t Table 1 Credit assess and below v sue has a spe	Corporate sment (i) < E will result in ecific short	s with the BBB- will use a capital de term rating,	e following e risk weight duction. it should be

Risk	15%	50%	100%	1,250%
weight				

## Other balance sheet exposures

Item	Description of item and risk	Guidance
	weighting	
200.1	Tangible fixed assets 100%	Premises, plant and equipment, other fixed assets for own use, and other interests in realty. Included are investments in land,
		premises, plant and equipment and all other fixed assets of the reporting institution, which are held for its own use, including any
		fixed asset held by the institution as lessee under a finance lease.
		Other interest in land, which is not occupied or used in the operation of the reporting institution's business, should also be reported here.
200.2	Equity 100%	Investments in equity of other entities and holdings of investment funds. Included are investments in commercial entities, other than
		those where a deduction from capital base is required. Investment funds should be included unless they invest in high-risk assets, in
		which case they are categorised as such, or they are fixed income
		(only debt investments, not equity) in which case they are
		categorised as per Annex 2.7 of the Revised Framework for Regulatory Capital Assessment <sup>4</sup> .
200.3	High-risk	Investments in venture capital and private equity, including
	assets 150%	investments in investment funds holding such investments, are
		weighted at 150%. A venture capital or private equity investment
		is deemed to be one which, at the time the investment is made, is:
		a) in a new or developing company or venture; or b) in a
		management buy-out or buy-in; or c) made as a means of financing the investee company or venture and accompanied by a
		right of consultation, or rights to information, or board
		representation, or management rights; or d) acquired with a view
		to, or in order to, facilitate a transaction falling within (a) to (c).
200.4	Other,	Other, including prepayments and debtors, should be classified
	including	here and weighted according to the underlying counterparty.
	prepayments	Unallocated amounts, including unallocated interest, should be
	and debtors 0-	weighted at 100%. This includes unrestricted fixed income
	150%	investment funds.

<sup>&</sup>lt;sup>4</sup> Located at the following link <u>https://www.bma.bm/document-centre/policy-and-guidance-banking</u>

#### Credit risk: Off-balance sheet portion

This applies to the "Off-balance sheet credit exposures" and the "Market-related offbalance sheet exposures (counterparty credit risk)" sections.

#### Column 1: Principal amount

The principal amount is the face value or gross amount of a given off-balance sheet transaction and not the fair value. Total absolute values should be reported.

#### Column 2: Credit conversion factor

A Credit Conversion Factor (CCF) is the percentage value used to convert an off-balance sheet exposure into an on-balance sheet equivalent (i.e., the credit equivalent amount). CCFs are generally pre-defined in the PIR Template.

#### Column 3: Credit Equivalent Amount (CEA)

A Credit Equivalent Amount (CEA) is the on-balance sheet equivalent of an off-balance sheet exposure. In the PIR Template, the CEA is a derived field. In relation to a non-market-related off-balance sheet transaction, the CEA is calculated by multiplying the principal amount of a particular transaction by the relevant CCF. The credit equivalent amount for some off-balance sheet exposure types may consist of several discrete exposures, each potentially attracting different CCFs. The reporting institution must, by reference to the description of the relevant items, determine the appropriate CCF(s) to be applied to the exposure(s) to calculate the credit equivalent amount for that off-balance sheet exposure type and report the total as a single credit equivalent amount. Credit derivative transactions, which are not in the trading book, are classified as non-market-related off-balance sheet transactions.

#### Column 4: Risk weight and column 5: RWA

The RWA amount of a given off-balance sheet transaction that gives rise to credit exposure, is calculated by multiplying the credit equivalent amount of a transaction by the risk-weight applicable to the counterparty or type of assets or, where relevant, the risk-weight applicable to the eligible guarantor or collateral.

Generally, the RWA is a derived field in the PIR template. In some cases, however, the amount must be entered individually. The RWA amount for some off-balance sheet exposure types may consist of several discrete exposures, each potentially attracting different risk-weights. The reporting institution must determine the appropriate risk-weight(s) to be applied to the exposure(s) to calculate the RWA for that off-balance sheet exposure type and report the total as a single RWA amount.

The reporting institution should categorise principal off-balance sheet exposures into the following standard items and report:

These off-balance sheet categories are the most common categories deemed to be
applicable as per The Revised Framework for Regulatory Capital Assessment 2008 <sup>5</sup> .

Item	Description of item	Guidance	CCF	
210	Direct credit	Direct credit substitutes relate to the financial	100%	
	Substitutes	requirements of a counterparty, where the risk of		
		loss to the reporting institution on the transaction is		
		equivalent to a direct claim on the counterparty,		
		(i.e., the risk of loss depends on the		
		creditworthiness of the counterparty). Report		
		instruments such as:		
		a) Acceptances granted and risk participations		
		in bankers' acceptances. Where a reporting		
		institution's own acceptances have been		
		discounted by that institution, the nominal		
		value of the instrument held should be		
		deducted from the nominal amount issued		
		under the facility and a corresponding on-		
		balance sheet entry made;		
		b) Guarantees given on behalf of customers to		
		stand behind the current obligations of the		
		customer and to carry out these obligations		
		should the customer fail to do so (e.g., a		
		loan guarantee);		
		c) Guarantees of leasing operations;		
		d) Guarantees of a capital nature. Such		
		guarantees given to a company, which is		
		not related to the reporting institution,		
		should be weighted at 100% and those to a		
		related company should be deducted from		
		the reporting institution's capital base (item		
		210.9);		
		e) Letters of credit not eligible for inclusion in item 220.		
		item 230; D. Standby, latters, of aradit, or other		
		f) Standby letters of credit, or other irrevocable obligations, serving as financial		
		guarantees where the institution has an		
		irrevocable obligation to pay a third-party		
		beneficiary if the customer fails to repay an		
		beneficiary if the customer rans to repay an		

<sup>&</sup>lt;sup>5</sup> Located at the following link <u>https://www.bma.bm/document-centre/policy-and-guidance-banking</u>

		outstanding commitment (e.g., letters of	
		credit supporting the issue of commercial	
		paper, delivery of merchandise; stock	
		lending (e.g., standby letters of credit,	
		which are related to non-financial	
		transactions should be reported in item	
		220));	
		g) Re-insurance or window letters of credit;	
		and	
		h) Acceptances drawn under letters of credit,	
		or similar facilities where the acceptor does	
		not have specific title 100% to an	
		identifiable underlying shipment of goods	
		(e.g., sales of electricity).	
		Direct credit substitutes of a capital nature	
		Any direct credit substitutes that are of a capital	
		•	
		nature and connected to the reporting institution or	
		given to another institution should be reported in item 210.0 and will be deducted from agnital in the	
		item 210.9 and will be deducted from capital in the	
		calculation of the risk asset ratio, including:	
		a) A guarantee, which takes the place of	
		capital (e.g., where a regulatory body	
		allows a company to gear up on such	
		guarantees (but see also 210(d)));	
		b) A guarantee of a capital instrument (unless	
		otherwise agreed with the Authority (e.g.,	
		do not include here the subordinated	
		guarantee of loan stocks raised by vehicle	
		company subsidiaries of the reporting	
		institution, where the loan stock is treated	
		as subordinated debt of the reporting	
		institution)).	
220	Transaction-related	Transaction-related contingencies relate to the on-	50%
	contingencies	going trading activities of a counterparty where the	
		risk of loss to the reporting institution depends on	
		the likelihood of a future event that is independent	
		of the creditworthiness of the counterparty. They	
		are essentially guarantees that support particular	
		non-financial obligations rather than supporting	
		customers' general financial obligations.	
		Report such items as:	
		a) Performance bonds, warranties and	
		indemnities (indemnities given for lost	

		<ul> <li>share certificates or bills of lading and guarantees of the validity of papers rather than the payment under certain conditions should not be reported in this return);</li> <li>b) Bid or tender bonds;</li> <li>c) Advance payment guarantees;</li> <li>d) Standby letters of credit relating to a particular contract or to non-financial transactions (including arrangements backing, inter alia, subcontractors' and suppliers' performance, labour and materials contracts, and constructions bids).</li> </ul>	20%
230	Trade-related contingencies	Report short-term, self-liquidating trade-related items such as documentary letters of credit issued by the reporting institution, which are or are to be, collateralised by the underlying shipment. Such letters should be weighted according to the counterparty on whose behalf the credit is issued and reported whether or not the terms and conditions of the credit have yet to be complied with.	
		Letters of credit issued by the reporting institution without provision for the reporting institution to retain title to the underlying shipment or where the title has passed from the reporting institution should be reported under direct credit substitutes (Item 210). A memorandum of pledge and a trust receipt are not regarded as giving the reporting institution title, and transactions secured by these should be shown under item 210.	
		Letters of credit issued on behalf of a counterparty back to back with letters of credit of which the counterparty is a beneficiary (back-to-back letters) should be reported in full.	
		Letters of credit advised by the reporting institution or for which the reporting institution is acting as reimbursement agent should not be reported.	
240	Lending of securities or posting	Include: a) repurchase/reverse repurchase agreements; and b) securities lending/borrowing transactions.	100%

	of securities as		
	collateral		
250	Assets sold with recourse	Asset sales with recourse (where the credit risk remains with the institution) fall into the weighting category determined by the asset and not according to the counterparty with whom the transaction has been entered into. Report put options written where the holder of the asset is entitled to put the asset back to the reporting institution (e.g., if the credit quality deteriorates). Also, report put options written by the reporting institution attached to marketable instruments or other physical assets.	100%
260	Forward asset purchases	The weight should be determined by the asset to be purchased, not the counterparty with whom the contract has been entered into. Include commitments for loans and other on-balance sheet items with certain drawdown. Exclude foreign currency spot deposits with value dates one or two working days after trade date.	100%
270	Uncalled partly paid shares and securities	<ul> <li>The unpaid part should only be included if there is a specific date for the call on that part of the shares and securities held. If there is no specific date, the unpaid part should be treated as a long-term commitment (see item 320).</li> <li>Include: <ul> <li>a) Any amounts owing on the uncalled portion of partly paid shares; and</li> <li>b) Securities held that represent commitments with certain drawdown by the issuer at a future date.</li> </ul> </li> </ul>	100%
280	Placements of forward positions	Agreements between two parties, whereby one will pay and the other receives an agreed rate of interest on a balance to be placed by one with the other at some predetermined date in the future. Exclude foreign currency spot deposits with value dates one or two working days after trade date. The weight should be determined according to the counterparty with whom the placement will be made.	100%
290	Note issuance and underwriting facilities	Note Issuance Facilities (NIF) and Revolving Underwriting Facilities (RUF) should include the total amounts of the reporting institution's underwriting obligations of any maturity. Where the facility has been drawn down by the borrower and the notes are held by anyone other than the reporting institution, the underwriting obligation should continue to be reported at the full nominal amount.	50%

		Include any note issuance and underwriting facilities. These involve arrangements, whereby a borrower may draw down funds up to a prescribed limit over a predefined period by making repeated note issues to the market and where, should the issue prove unable to be placed in the market, the unplaced amount is to be taken up or funds made available by a bank being committed as an underwriter of the facility. The reporting institution's own holding of the notes should be reported under loans, advances, bills and finance leases, and, therefore, the nominal amount of the notes held should be deducted from the nominal amount of the facility to be shown here.	
300	Sale and repurchase agreements	Report sale and repurchase agreements (repos), (i.e., when the reporting institution is the seller of the asset where the asset sold is not reported on the balance sheet). If the asset sold is kept on the balance sheet it should not be reported here but in the relevant line in the on-balance sheet section of this return. When the asset does not appear on the balance sheet, the weighting category is to be determined by the issuer of the security (or borrower in the case of a loan) and not according to the counterparty with whom the transaction has been entered into. Repos associated with reverse repos should not be reported under item 300; the liability under such repos should be reported under "Total Capital and Liabilities (1880)". The reporting institution should refer to the Authority where it has a repo in item 300 and offsettable short stock positions on balance sheet in item 400 (investment in central governments and central banks-net short positions) or 1880, which would meet the general requirements for the netting of stock positions. <u>Repos</u> Reporting institutions that have sold loans or other assets to other institutions for a finite period with a commitment to repurchase should continue to report the loan or asset on the balance sheet. Where this is not the case, based on Generally Accepted Accounting Principles (GAAP) applied by the reporting institution, sale and repurchase agreements should be reported in the off-balance sheet section of the return.	100%

		<u>Reverse repos</u> Reporting institutions, which have purchased such loans or assets (i.e., purchase and resale agreements or reverse repos), should, for the duration of the agreement, report the transaction as a collateralised loan, adopting the normal weight for the counterparty unless the assets are eligible for a reduced weight.	
310.1	Endorsement of bills – accepted by banks	Endorsements of bills should be reported at the full nominal amount, less any amount for bills that the reporting institution now holds but had previously endorsed.	0%
		Where the reporting institution is the first endorser of a bill that has been accepted by another institution, such endorsements should be reported in item 310.1. (Where a reporting institution has endorsed its own acceptances, no further amount should be reported than the acceptance reported in item 210). If the reporting institution is not the first endorser of a bill, such endorsements need not be reported.	
310.2	Endorsement of bills – not accepted by banks	Endorsements of bills, which have not been accepted, should be reported in items $310.2 - 310.4$ according to the risk weight category of the issuer; where such a bill has been previously endorsed, the reporting institution's endorsements will warrant a 20% weight. Endorsements of bills that have been previously endorsed by two or more institutions need not be reported.	100%
320	Other commitments	<u>Underwriting commitments</u> Commitments arising from the underwriting of discrete issues of equities or bonds should be included in item 320.2.9 and will attract a risk weighting of 100% unless concessionary treatment has previously been agreed in a particular case with the Authority. (NIFs and RUFs, however, should be reported in item 290.)	
		Irrevocable standby commitments (320.6) and commitments to provide capital to related parties (320.6) Apply a flat, 40% credit conversion factor that applies to all commitments regardless of maturity of the underlying facility.	
		Commitments with certain drawdown	

			I
		Commitments for loans and other on-balance sheet items with certain drawdown should not be reported here but in item 260.	
320.2	Other commitments with an original maturity of one year or less of which: Balances available for redraw under redraw facilities of term loans	<ul> <li>Report here other undrawn commitments, classified as to whether:</li> <li>a) They have an original maturity of one year or less, or are unconditionally cancellable at any time (item 320.2); or</li> <li>b) They have an original maturity of over one year (item 320.3)</li> </ul>	40%
320.3	Other commitments with an original maturity of over one year or less of which: Balances available for redraw under redraw facilities of term loans	<ul> <li>commitment from the date the customer is advised of the facility (e.g., the date of the letter advising the customer) regardless of whether the commitment is revocable or irrevocable, conditional or unconditional, or the facility contains a "material adverse change" clause. Facilities subject to annual review should only be classified within 320.2 if the institution is confident that there is no client expectation of automatic renewal/continuation.</li> <li>Rolling or undated/open-ended commitments ("evergreens" and including overdrafts) should be included under (a), providing that they are unconditionally cancellable at any time without notice and subject to credit review at least annually. Other rolling or undated commitments should be</li> </ul>	
		reported under (b). Unused credit card lines should be reported under (a).	
320.4	Commitments that can be unconditionally cancelled at any time without notice	Commitments (including the undrawn portion of any binding arrangements, which obligate the reporting institution to provide funds at some future date) that are unconditionally cancellable without prior notice by the reporting institution other than for "force majeure" reason, or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness. This also includes any revolving or undated/open- ended commitments (e.g., overdrafts or unused credit card lines) provided that they can be unconditionally cancelled at any time and are subject to credit review at least annually.	10%

		Facilities should only be classified here if the institution is confident that the client is aware of both the review process and has confirmed that the facility may be withdrawn at any time.	
330	Total	Derived in the return. Calculated as sum of item 210 to 320.6	
340	All other non- market related off- balance sheet transactions	Include any other non-market related off-balance sheet transactions that give rise to credit risk but are not specifically identified in the PIR template. For any such transaction, an institution must consult the Authority on the appropriate CCF to be used for calculating the CEA of that particular transaction for capital adequacy purposes.	
		Where the non-market-related off-balance sheet transaction is an undrawn or partially undrawn facility, the institution is to include the maximum unused portion of the commitment that could be drawn during the remaining period to maturity for the calculation of the CEA. Any drawn portion of a commitment forms part of an entity's on balance sheet credit exposure.	
		Regarding irrevocable commitments to provide off-balance sheet facilities, the original maturity will be measured from the commencement of the commitment up until the time the associated facility expires. For example, an irrevocable commitment, with an original maturity of six months, to provide finance with a nine-month term, is deemed to have an original maturity of 15 months.	
		Irrevocable commitments to provide off-balance sheet facilities are to be assigned the lower of the two applicable CCFs. For example, an irrevocable commitment with an original maturity of six months to provide a guarantee in support of a counterparty for a period of nine months attracts the 50% CCF applicable to the commitment, as opposed to the 100% CCF applicable to the guarantee.	
		Undrawn balances of revolving facilities (e.g., credit cards, overdrafts) are to be reported under item 320.4 (Commitments that can be unconditionally cancelled at any time without notice).	

of its obligations under certain conditions.		All commitments are to be included in the capital calculation regardless of whether they contain "material adverse change" clauses or any other provisions that are intended to relieve an institution of its obligations under certain conditions	
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## II. OPERATIONAL RISK

#### Introduction

Three methods are recognised for calculating operational risk charges:

- a) The Basic Indicator Approach (BIA);
- b) The Standardised Approach (SA); and
- c) Advanced Measurement Approaches (AMA).

To make use of the SA and AMA, an institution must satisfy the Authority that it meets the qualifying criteria as set out in paragraphs 174-177 and 178-182 of the Revised Framework for Regulatory Capital Assessment<sup>6</sup>.

## Definition of year of operation

Under the BIA and SA, the reporting institution's capital charge for operational risk is calculated using gross income data derived from the last three completed financial years for which audited financial statements have been prepared.

## General layout of form

The reporting form is divided into two sections for reporting, either under the BIA or the SA. If an institution seeks the Authority's approval to use the AMA, the reporting format will be agreed with the Authority as part of this process.

## Basic Indicator Approach (BIA)

The capital charge for operational risk under the BIA is calculated as 15% (the "Alpha" factor) of average gross income over the past three years, ignoring those years where income was not positive.

Item 780, total gross income is defined as the sum of net interest income (item 760) and net non-interest income (item 770) for each year. Gross income should be consistent with the amounts included in the financial statements prepared using GAAP. Net interest income and net non-interest income are defined in the following table:

Item	Description	Guidance
760	Net interest income	Interest income net of interest expense gross of any provisions (e.g., for unpaid interest).
770	Net non-interest income	Net non-interest income gross of operating expense (including any fees paid for outsourced services) and should exclude (i) realised profits and losses from sale of securities (unless they are earned from trading activities), (ii) extraordinary or irregular items and (iii) income derived from insurance. Gross income will include such items as management fees, advisory fees, investment and dividend income plus other

<sup>&</sup>lt;sup>6</sup> Located at the following link <u>https://www.bma.bm/document-centre/policy-and-guidance-banking</u>

operating income. Additional categories of revenue with descriptions of their nature are included in the section on the Standardised Approach below. A separate schedule may be included with the submitted return to show the individual amounts included in this
item.

Item 790, Average of Positive Total Annual Income is calculated as the sum of Gross Income for each year recorded in line 780 where Gross Income is positive, divided by the number of positive entries summed.

Item 810, Capital Charge, is calculated as 15% of item 790, Average of Positive Total Annual Income.

## Standardised Approach (SA)

The SA requires the allocation of income by eight primary business lines for each of the previous three completed financial years for which audited financial statements have been prepared. Multiplying these income amounts by the appropriate scaling factor for that business line (the "Beta" factor) gives the capital charge for each of these lines.

Item	Primary business line	Beta	Secondary business line	Activity groups
830.1	Corporate finance	18%	Corporate finance Municipal/government finance Merchant banking Advisory services	Mergers and acquisitions, underwriting, privatisations, securitisation, research, debt (government, high yield), equity, syndications, initial public offering, secondary private placements.
830.2	Trading and sales	18%	Sales Market making Proprietary positions Treasury	Fixed income, equity, foreign exchanges, commodities, credit, funding, own position securities, lending and repos, brokerage, debt, prime brokerage.
830.5	Payment and settlement	18%	External clients	Payments and collections, funds transfer, clearing and settlement.
830.6	Agency services	15%	Custody	Escrow, depository receipts, securities lending (customers) corporate actions.
			Corporate agency	Issuer and paying agents
830.7	Asset management	12%	Corporate trust Discretionary fund management	Pooled, segregated, retail, institutional, closed, open, private equity.
			Non-discretionary fund management	Pooled, segregated, retail, institutional, closed, open.
830.8	Retail brokerage	12%	Retail brokerage	Execution and full service

Line items 830.1 to 830.8 are derived by multiplying the corresponding income reported in line items 820.1 to 820.8 by the appropriate Beta for each business line.

Line item 830 is the sum, for each individual year, of items 830.1 to 830.8. In any given year, positive capital charges for any individual lines may be offset by negative capital charges for other business lines in that year. Nevertheless, where the total charge for any given year across all business lines is negative, a total of zero should be recorded in line 830 for that particular year.

Item 840, SA Requirement, reflects the notional capital charge and the Risk-Weighted Asset equivalent amount. The capital charge is calculated as the average of the three amounts in line 840. The RWA Equivalent is calculated by multiplying this notional capital charge by 12.5.

## III. MARKET RISK

Market risk is the risk of losses in on and off-balance sheet positions arising from movements in market prices. Any financial institution operating in the interest rate, equity, foreign exchange and commodities markets may be exposed to potentially large swings in market prices and significant consequential losses.

Entities are expected to manage the market risk in their trading book in such a way that capital requirements are being met on a continuous basis.

Market risk comprises general market risk and specific risk. General market risk is the risk of loss as a result of changes in the general level of market prices or interest rates. It arises from positions in interest rate, equities, foreign exchange and commodities. Specific risk is the risk that the value of a security will change due to issuer-specific factors. It applies to interest rate and equity positions related to a specific issuer.

The Standard Method of measuring market risk involves a building-block approach under which the specific risk and the general market risk elements arising from debt and equity positions are calculated separately and summed arithmetically.

## Interest rate risk – specific risk

Specific risk components relate to risk of a price change in the instrument concerned due to factors related to its issuer or, in the case of a derivative, to the issuer of the underlying instrument. In measuring this risk, offsetting will be restricted to matched positions in the identical issue (including position in derivatives). Even if the issuer is the same, no offsetting will be permitted between different issues since differences in coupon rates, liquidity, call features, etc. mean that prices may diverge in the short run. The guidance also provides for partial offsetting.

Specific risk is to be assessed according to the classification of issuer of the security or underlying security in the case of derivative instruments. Issuers are classified into the categories of government, qualifying and other. Instruments with issuers in the government and qualifying categories should be further classified according to the residual term to final maturity of the security or underlying security.

The instruments covered include all fixed-rate and floating-rate debt securities and instruments with similar behaviour patterns, including non-convertible preference shares. Convertible bonds (i.e., debt issues or preference shares that are convertible, at a stated price, into common shares of the issuer) should be treated as debt securities if they trade like debt securities and as equities if they trade like equities.

Note that traded mortgage securities and mortgage derivative products possess unique characteristics because of the risk of prepayment.

Also, a security that is the subject of a repurchase or securities lending agreement will be treated as if it were still owned by the lender of the security. That is, it will be treated in the same manner as other securities positions.

Item	Nature of	Guidance
	item	
1.1 and1.2	Short and long positions	The sum of the market values of individual positions in each issuer category should be reported in columns 1 and 2 for short and long positions, respectively. In summing the market values within each category, if there is a matched position in the same security (i.e., both the issuer and issue are identical), the matching positions may be offset and omitted from the calculation of specific interest rate risk.
1.3	Gross market value	Short position plus long position
1.4	Specific risk- weight	Pre-set percentages based upon institution's and investment instruments' credit rating.
1.5	Capital charge	Gross market value multiplied by specific risk-weight.
1.6	Total capital charge	Sum of all capital charges founding column 5.

**Table I:** Guidance for completion of the Specific Interest Rate Risk template

## Interest rate risk – General market risk

General risk relates to the risk of loss from a price change in the instrument due, in this case of traded debt instruments or debt derivatives, to a change in the level of market interest rates.

A choice between two methods, maturity method and the duration method, of measuring general market risk is permitted. Institutions must opt for one method and may not use a combination of two methods.

Institutions must elect and use their chosen method on a continuous basis unless a change is authorised by the Authority.

Separate maturity ladders must be used for each different currency except for those currencies in which business is insignificant.

The tables below explain the "Interest Rate Risk – General Market Risk" in the PIR template.

Item	Nature of item	Guidance
А	Zone	Bonds to be placed into the zone that reflects
		relevant maturity band that is provided. No input
		required.
В	Coupon =/>3% (maturity	Bonds held with a coupon rate equal or greater than
	band)	3%. No input required.
С	Coupon <3% (maturity	Bonds held with a coupon rate less than 3%. No
	band)	input required.
D	Long (individual net	
	positions)	positions to be input into the relevant time band for
		column B or C.
E	Short (individual net	
	positions)	positions to be input into the relevant time band for
		column B or C.
F	Weighting factor	Pre-set percentages provided. No input required.

The explanations below refer to specific items on the PIR template:

## Ten percent capital charge on matched items labelled S

This is used to offset the weighted longs and shorts in each time-band, resulting in a single short or long position for each band. Since, however, each band can include different instruments and different maturities, a 10% capital charge to reflect basis risk and gap risk is levied on the smaller of the offsetting positions, whether short or long. Thus, if the sum of the weighted longs in a time-band is \$100 million and the sum of the weighted shorts \$90 million, the so-called "vertical disallowance" for that time-band is 10% of \$90 million (i.e., \$9 million).

## Horizontal offsetting

Institutions are permitted to conduct two rounds of 'horizontal offsetting', first between the net positions in each of three zones: zero to 1 year, 1-4 years, and 4 years and over; and subsequently between the net positions in the three different zones. (For coupons less than 3%, the zones are 0-1 year, 1 to 3.6 years, and 3.6 years and over.) The offsetting is subject to a scale of disallowances expressed as a fraction of the matched positions, as set out in the table below. The weighted long and short positions in each of the three zones may be offset, subject to the matched position attracting a disallowance factor that is part of the capital charge. The residual net position in each zone may be carried over and offset against opposite positions in other zones, subject to a second set of disallowance factors.

## Horizontal Disallowances

## Guidance Notes on the Maintenance of Net Assets, Capital and Liquidity

Zones*	Time-band	Within the zone	Between adjacent zones	Between zones 1 and 3
Zone 1	0-1 month	40%		
	1-3 months			
	3-6 months			
	6-12 months			
Zone 2	1-2 years	30%		
	2-3 years			
	3-4 years			
	4-5 years			
Zone 3	5-7 years	30%		
	7-10 years			
	10-15 years			
	15-20 years			
	Over 20 years			

\* For coupons less than 3%, the zones are 0-1 year, 1-3.6 years and 3.6 years and over.

## Duration method

Institutions are encouraged, where the Authority is satisfied of their capabilities, to utilise the duration method in calculating general market risk regarding interest rate risk. The duration method provides a more accurate measure of the general market risk by calculating the price sensitivity of each position separately.

Item	Nature of item	Guidance
А	Zone	Bonds to be placed into the zone that reflects the
		relevant maturity band that is provided. No input required.
B (years)	Duration band	No input required.
С	Long (individual net positions)	Sum of market values for all individual long positions to be input into the relevant time band for
		column B.
D	Short (individual net positions)	Sum of market values for all individual short positions to be input into the relevant time band for column B.
E (% PA)	Assumed move in rates	This figure represents the assumed change in a bond's yield in regard to its maturity band. As these percentages are pre-set, there is no input required for this field.
F (years)	Duration	Input duration in years.

## Equity position risk – Specific and general market risk

Specific risk is defined as the institution's gross equity positions (i.e., sum of all long equity positions and of all short equity positions) in an individual equity.

General market risk is the difference between the sum of the longs and the sum of shorts (i.e., overall net position in an equity market) for the market as a whole.

The long or short position in the market must be calculated on a market-by-market basis.

The capital requirement for specific risk and for general market risk will each be 8%.

## Calculation of positions

Derivative positions are to be converted into notional equity positions, to allow for the calculation of the standard formula for specific and general market risk.

## Calculation of capital charges

Matched positions in each identical equity or stock index in each market may be fully offset, resulting in a single net short or long position to which the specific and general market risks apply.

Item Description of item Guidance
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1.1	Positions attracting 8% specific risk charge	Capital charge is equal to 8% of gross position.
1.2	Positions attracting 2% specific risk charge	Only well diversified indices can be placed into this category.
1.3	Positions attracting 4% specific risk charge	For deliberate arbitrage strategy involving futures contracts based on broadly based indices matching a basket of stocks.
1.4	Total specific risk charge	The sum of columns 1.1, 1.2 and 1.3.
1.5	Net positions for general market risk	This is the difference between sum of long positions and the sum of short positions. An overall net short position in a market should be indicated by a negative sign.
1.6	General market risk charge	Calculates general market risk for each market as 8% of the absolute value of the net position reported in column 1.5.
1.7	Total market risk charge	Sum of columns 1.4 and 1.6.
1.8	Total capital charge across all countries	Sum of column 1.7.

The Authority adopts the Basel framework guidelines for the treatment of equity risk. No national discretion has been taken by the Authority at this time regarding these paragraphs.

## Foreign exchange risk

This section highlights the minimum capital standard to cover the risk of holding or taking positions in foreign currencies. Please note that gold is dealt with as a foreign exchange position due to its volatility being more in line with foreign currencies rather than a commodity.

Item	Description of item	Guidance
1.1	Net spot position	Balance sheet "assets" less "balance sheet liabilities"
		(include accrued interest, denominated in the currency in
		question).
1.2	Net forward position	"Gross purchases" less "gross sales" (i.e., all amounts to be received less all amounts to be paid under forward foreign exchange transactions, including currency futures and the principal on currency swaps not included in the spot position). Note that forward currency positions will normally be valued at current spot market exchange rates.
1.3	Guarantees	Include all guarantees (or similar instruments) currently held.
1.4	Net future income/expenses	Interest accrued (but not yet received) to be included as well as any accrued expenses (but not yet paid). Unearned but expected future interest and anticipated expenses may be excluded unless the amounts are certain and institutions have taken the opportunity to hedge them.

1.5	Net delta base of	Net delta of foreign currency options portfolio currently
	foreign currency	held.
	options	
1.6	Net open position	The sum of columns 1.1, 1.2, 1.3, 1.4 and 1.5.
1.7	Net long position	Include all net long positions for all currencies.
1.8	Net short position	Include all net short positions for all currencies.
1.9	Gold-absolute value	Sum of the net spot position and net forward position (note:
	of open position	These positions should be calculated in the same manner as
		net open positions in foreign currencies 1.6).
		Net open position should be reported in Bermuda dollars,
		including sign (i.e., positive or negative).
		A negative value indicates a short position and a positive
		value indicates a long position.
1.10	Greater of absolute	Report the larger of the sum of the net long positions or the
	value of net long and	sum of the net short positions in this row.
	net short position	
1.11	Total capital charge	Calculated as 8% of the sum of items 1.10 and item 1.9.
	for foreign exchange	
	risk	

The Authority adopts the Basel framework guidelines for the treatment of foreign exchange risk.

## Commodity risk

A commodity is defined as a physical product that is or can be traded on a secondary market. For example, items such as agricultural products, minerals (including oil) and precious metals. Note that gold is dealt with as a foreign exchange position and not a commodity because its volatility is more in line with foreign currencies, and institutions manage their positions in a similar manner to foreign currencies.

There are two approaches in measuring commodity risk for financial institutions, which are licensed and regulated in Bermuda, the maturity ladder approach and the simplified approach. For both methods the long and short positions in each commodity may be reported on a net basis for the purposes of calculating open positions. In some cases, the Authority may approve the netting between different sub-categories.

Item	Nature of item	Guidance
1	Commodity	List commodities currently held
1.1	Long position	Sum of market values for long positions
1.2	Short position	Sum of market values for short positions
1.3	Gross position	Sum 1.1 and 1.2
1.4	Capital charge	3% of figure in column 1.3
1.5	Net position	Net sum of columns 1.1 and 1.2
1.6	Capital charge	15% of figure in 1.5
Box (A)	Capital charge	Sum of column 1.4

## Simplified approach

Box (B)	Capital charge	Sum of column 1.6
Box	Total capital charge	Sum of (A) and (B)
(A)+(B)		

## Maturity ladder method

Item	Nature of item	Guidance
1	Time bands	Length of maturity regarding listed commodity. No
		input required.
1.1	Long position	Amount of units. Physical stocks should be allocated to
		the first time-band.
1.2	Short position	Amount of units. Physical stocks should be allocated to
		the first time-band.
1.3	Matched long and	Total matched long and short positions in columns 1.1
	short positions	and 1.2.
1.4	Commodity spot price	Spot price for the commodity.
1.5	Spread rate %	Pre-set percentages provided. No input required.
1.6	Capital charge	Column 1.3 multiplied by column 1.4 multiplied by
		column 1.5.
1.7	Net residual	Unmatched positions from columns 1.1 and 1.2.
	unmatched position	-
1.8	Capital charge %	Pre-set percentages provided. No input required.
1.9	Capital charge	Column 1.8 multiplied by column 1.7.
Box (A)	Capital charge	Sum of column 1.6.
Box (B)	Capital charge	Sum of column 1.9.
Box	Total capital charge	Sum of (A) and (B).
(A)+(B)		

The Authority adopts the Basel framework guidelines for the treatment of commodity risk.

## IV. MARKET-RELATED OFF-BALANCE SHEET CREDIT EXPOSURES (COUNTERPARTY CREDIT RISK)

The Authority adopts the guidance of the Basel framework to define the scope for calculating charges for counterparty credit risk, the methods for calculating the exposure and the risk weights. The standardised approach has been adopted.

For this section, the Authority has also adopted guidance under the Basel framework, which deals with specific treatments for exposures related to derivative transactions that would cover elements of market-related off-balance sheet credit exposures.

Item	Nature of item	Guidance
1.1		Face value or gross amount of a given off- balance sheet transaction and not the fair value. Total absolute values should be reported.

## Guidance Notes on the Maintenance of Net Assets, Capital and Liquidity

1.2	Add-on factor	Percentage value used to convert off-balance sheet exposure into an on-balance sheet equivalent. Pre-set percentages provided.
1.3	Potential future credit exposure	Column 1.1 multiplied by Column 1.2.
1.4	Current exposure	Greater of zero or current market value of a transaction or portfolio of transactions as defined in the Basel III Framework.
1.5	Credit Equivalent Amount	Sum of Column 1.3 and Column 1.4
1.6	Risk Weight	Relevant risk weight of the counterparty
1.7	Risk Weighted Asset	Column 1.5 multiplied by Column 1.6.

## V. EXHIBIT

Table 1: Mapping of ECAI's credit assessments to risk weightings: Long-term mapping

S&P	Fitch's	Moody's	Corporat	Banks and		Sovere	PSE
Assessmen	Assessmen	Assessmen	e	securities firms		ign	(Sovere
ts	ts	ts		Maturity	Maturity		ign
				> 3	3		rating
				months	months		based)
					or less		
AAA to	AAA to	Aaa to	20%	20%	20%	0%	20%
AA-	AA-	Aa3					
A+ to A-	A+ to A-	A1 to A3	50%	50%	20%	20%	50%
BBB+ to	BBB+ to	Baa1 to	100%	50%	20%	50%	100%
BBB-	BBB-	Baa3					
BB+ to	BB+ to	Bal to	100%	100%	50%	100%	150%
BB-	BB-	Ba3					
B+ to B-	B+ to B-	B1 to B3	150%	100%	50%	100%	150%
CCC+ and	CCC+ and	Caa1 and	150%	150%	150%	150%	150%
below	below	below					

Table 2: Mapping consensus risk scores from participating ECAIs risk weightings

Country Score	Sovereign		
0 - 1	0%		
2	20%		
3	50%		
4 - 6	100%		
7	150%		