



# The DFSA Rulebook

Prudential – Investment, Insurance  
Intermediation and  
Banking Module

**(PIB)**

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## 1 GENERAL REQUIREMENTS

### 1.1 Application

- 1.1.1** (1) This module (PIB) applies to every Authorised Firm other than:
- (a) an Insurer; and
  - (b) a Representative Office.
- (2) The Rules in this module apply to an Authorised Firm in accordance with its Category determined under section 1.3.

#### Guidance

1. The effect of Rule 1.1.1 is that these Rules apply to all Authorised Firms, except those carrying on Insurance Business, that is, Insurers. Those Authorised Firms that are authorised to effect or carry out Contracts of Insurance should refer to the PIN module. These Rules apply both to Domestic Firms and Authorised Firms conducting Financial Services through a branch in the DIFC. The DFSA may modify or waive the operation of certain Rules or specified parts of such Rules in appropriate circumstances. The DFSA is more likely to consider such modifications or waivers in the case of those Authorised Firms operating in the DIFC through a branch. It is unlikely, however, the DFSA will waive or modify the system and control requirements.
2. The DFSA's Rules reinforce the fitness and proprietary requirements, GEN chapter 5 - Management Systems and Principle 4 for Authorised Firms. The PIB module is set out in:
  - a. two general chapters setting overall requirements: General Requirements and Capital; and
  - b. six chapters setting specific requirements relating to the following particular risks or issues: Islamic Financial Business (including Displaced Commercial Risk), Credit Risk, Market Risk, Liquidity Risk, Group Risk and Operational Risk.
3. The application of each section of this module as it applies to each Category of Authorised Firm is set out in Table 4 of this chapter.

## 1.2 Financial resources

### 1.2.1 An Authorised Firm must:

- (a) have and maintain at all times financial resources of the kinds and amounts specified in, and calculated in accordance with, the Rules in this module; and
- (b) ensure that it maintains financial resources in addition to the requirement in (a) which are adequate in relation to the nature, size and complexity of its business to ensure that there is no significant risk that liabilities cannot be met as they fall due.

#### Guidance

For the purposes of Rule 1.2.1, the Authorised Firm's Governing Body should assess whether the minimum financial resources which are required by the DFSA as set out in PIB are adequate in relation to the Authorised Firm's specific business. Additional financial resources should be maintained by the Authorised Firm where its Governing Body has considered that the required minimum financial resources do not adequately reflect the nature and risks of the Authorised Firm's business.

## 1.3 Categories of Authorised Firms

#### Guidance

1. Authorised Firms are divided into Categories to provide a clear framework for determining which specific Rules in PIB apply to each Authorised Firm. The Rules in this section enable an Authorised Firm to determine into which Category it falls.
2. Table 1 sets out the categorisation process diagrammatically.
3. In Table 1, an emboldened box indicates the Financial Service that is determinative of the Category into which an Authorised Firm falls. An Authorised Firm may, if authorised under its Licence to do so, conduct any number of Financial Services specified under any lower Category than the one that applies to the Authorised Firm in accordance with this section. For example, a Category 1 Firm could conduct any of the Financial Services specified under Categories 2, 3 or 4 (if authorised to do so). However, a Category 4 Firm may only conduct any of the Financial Services listed under Category 4, for which it is authorised.

#### Category 1

- ### 1.3.1
- An Authorised Firm whose Licence authorises it to carry on the Financial Service of Accepting Deposits and which does not meet the criteria of Category 5 is in Category 1.

**Guidance**

A Category 1 Authorised Firm may be authorised to conduct other Financial Services, but it is the authorisation for Accepting Deposits that is determinative of its belonging to Category 1.

**Category 2**

**1.3.2** An Authorised Firm is in Category 2 if:

- (a) its Licence authorises it to carry on one or more of the Financial Services of Dealing in Investments as Principal or Providing Credit; and
- (b) its dealing activities are not restricted in accordance with Rule 1.3.3(1)(a)(i); and
- (c) it does not meet the criteria of Categories 1 or 5.

**Guidance**

A Category 2 Authorised Firm may be authorised to conduct other Financial Services, but it is the authorisation for Dealing in Investments as Principal and the absence of the Accepting Deposits or Providing Credit authorisation that are determinative of its belonging to Category 2.

**Category 3**

**1.3.3** (1) An Authorised Firm is in Category 3 if:

- (a) its Licence authorises it to carry on one or more of the Financial Services of:
    - (i) Dealing in Investments as Principal (where it does so only as a matched principal);
    - (ii) Dealing in Investments as Agent;
    - (iii) Managing Assets;
    - (iv) Managing a Collective Investment Fund;
    - (v) Providing Custody;
    - (vi) Providing Trust Services (where it is acting as trustee in respect of at least one express trust); or
    - (vii) Acting as the Trustee of a Fund; and
  - (b) it does not meet the criteria of Categories 1, 2 or 5.
- (2) For the purposes of this Rule, an Authorised Firm Deals in Investments as a “matched principal” if:

- (a) it enters into transactions as a principal only for the purpose of fulfilling its Clients' orders;
- (b) it holds positions for its own account ("positions") only as a result of a failure to match Clients' orders;
- (c) the total market value of the positions it holds is no more than 15% of the Firm's Tier One Capital resources; and
- (d) the positions are incidental and provisional in nature and are strictly limited to the time reasonably required to carry out a transaction of that nature.

**Guidance**

A Category 3 Authorised Firm may be authorised to conduct other Financial Services, but it is the authorisation for Dealing in Investments as Agent, Managing Assets, Managing a Collective Investment Fund, Acting as the Trustee of a Fund or Providing Custody, and the absence of authorisation for the activities specified in Rules 1.3.1 and 1.3.2 that are determinative of its belonging to Category 3.

**Category 4**

**1.3.4** An Authorised Firm is in Category 4 if:

- (a) its Licence authorises it to carry on one or more of the Financial Services of Arranging Credit or Deals in Investments, Advising on Financial Products or Credit, Arranging Custody, Insurance Intermediation or Insurance Management, Operating an Alternative Trading System or Providing Fund Administration or Providing Trust Services (where it is not acting as trustee in respect of an express trust); and
- (b) it does not meet the criteria of Categories 1, 2, 3 or 5.

**Guidance**

An Authorised Firm in Category 4 may not be authorised to conduct any other Financial Service; if it were so authorised it would belong to another Category. In accordance with Rule 1.3.7, only those Authorised Firms in Category 4 which are authorised to carry on the Financial Services of Insurance Intermediation or Insurance Management may hold Insurance Money.



### **Category 5**

**1.3.5** An Authorised Firm is in Category 5 if it:

- (a) carries on its entire business operation in accordance with Shari'a; and
- (b) Manages a Profit Sharing Investment Account.

#### **Guidance**

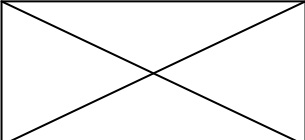
Authorised Firms in Categories 1 to 4 may also carry out Islamic Financial Business, but only those Authorised Firms in Categories 1 to 3 may Manage a Profit Sharing Investment Account. They will not fall within Category 5 unless the whole of the business is conducted in accordance with Shari'a and they Manage a Profit Sharing Investment Account.

#### **Client Assets**

**1.3.6** The Rules in PIB apply to the whole business of an Authorised Firm except in relation to Clients' Assets that are held or controlled by an Authorised Firm which are not included in any prudential calculation.

- 1.3.7**
- (1) An Authorised Firm in Category 4 must not hold Client Money.
  - (2) An Authorised Firm in Category 4 must not hold Insurance Money unless:
    - (a) it is authorised by its Licence to carry on the Financial Services of Insurance Intermediation or Insurance Management; and
    - (b) the Insurance Money is held for the purpose of carrying on its Insurance Intermediation or Insurance Management business.

**Table 1 – Categorisation of Authorised Firms**

Category 1	Category 2	Category 3	Category 4	Category 5
Accepting Deposits	Dealing in Investments as Principal	Dealing in Investments as Principal only as a matched principal as defined in Rule 1.3.3 (2)	Arranging Credit or Deals in Investments	An Islamic Financial Institution whose entire business is conducted in accordance with Shari'a  <b>and</b>  which Manages a Profit Sharing Investment Account
	Providing Credit	Dealing as Agent	Advising on Financial Products or Credit	
		Managing a Collective Investment Fund	Arranging Custody	
		Managing Assets	Insurance Intermediation	
		Providing Custody	Insurance Management	
		Providing Trust Services as a trustee of an express trust	Operating an Alternative Trading System	
		Acting as the Trustee of a Fund	Providing Fund Administration	
			Providing Trust Services other than as a trustee of an express trust	
Managing a Profit Sharing Investment Account	Managing a Profit Sharing Investment Account	Managing a Profit Sharing Investment Account		

**Notes:**

1. The Financial Services described in the emboldened boxes are the determinants for the prudential Category. The activities set out in the boxes in the table are Financial Services (see GEN chapter 2). The Financial Services that an Authorised Firm is authorised to carry on are specified on its Licence.
2. If a Person carries on any one or more of the Financial Services specified in an emboldened box under a particular Category, then the highest such Category is that Person's Category for the purposes of this module.
3. The one and only exception to the above, is an Islamic Financial Institution which Manages a Profit Sharing Investment Account. Such an institution falls in Category 5.
4. The Financial Service of Managing a Profit Sharing Investment Account is not set out in an emboldened box because it is not a determinant for a Person's prudential Category, however, a Category 4 Firm cannot carry on such a activity, hence the crossed box under Category 4.

## 1.4 The trading book

**1.4.1** An Authorised Firm must have a Trading Book if:

- (a) it has positions that must be included in the Trading Book under the criteria set out in App1;
- (b) those positions are held with trading intent in accordance with Rule A1.3.3; and
- (c) the total value of the positions eligible for inclusion in the Trading Book pursuant to (a) and (b):
  - (i) normally exceeds \$15 million or 5% of its combined on and off-balance sheet positions; or
  - (ii) has exceeded \$20 million or 6% of its combined on and off-balance sheet positions at any time in the preceding twelve month period.

### Guidance

The criteria underlying Rule 1.4.1 as well as additional detail regarding the definition of the Trading Book are provided in App1.

**1.4.2** An Authorised Firm that must have a Trading book in accordance with Rule 1.4.1 must:

- (a) comply with the requirements of App1; and
- (b) differentiate its business between Trading Book activity and Non-Trading Book activity on a consistent basis.

**1.4.3** (1) An Authorised Firm which has a Trading Book must have adequate systems and controls to:

- (a) monitor the size of its Trading Book; and
- (b) ensure that positions are included consistently in its Trading Book and Non-Trading Book so that:
  - (i) the inclusion of hedging positions in the Trading Book or the Non-Trading Book at all times reflect the intent of the Authorised Firm in holding the position; and
  - (ii) adequate records are made if positions are transferred between Trading and Non-Trading Books so that the transfers may be identified.

- (2) An Authorised Firm must retain records in accordance with the record-keeping requirements of GEN chapter 5 - Management Systems and Controls for six years.

## **1.5 Reporting**

- 1.5.1** (1) An Authorised Firm must comply with the accounting and prudential reporting requirements set out in this chapter and PRU which apply to it.
- (2) The DFSA may impose additional reporting requirements on an Authorised Firm.
- 1.5.2** An Authorised Firm must prepare its returns in accordance with the Rules in this chapter and the instruction guidelines in PRU and the DFSA's electronic prudential reporting system.

### **Guidance**

The returns and instructional guidelines are provided in PRU and the DFSA's electronic prudential reporting system.

## **1.6 Submission of returns**

- 1.6.1** Subject to Rule 1.6.2 an Authorised Firm must, submit its returns in writing to the DFSA to:

Supervision Division  
DFSA  
Level 13, The Gate  
PO Box 75850  
Dubai, United Arab Emirates

- 1.6.2** When the DFSA has issued a notice announcing that the DFSA's electronic prudential reporting system is in operation, an Authorised Firm must, from the date specified in the notice submit its returns to the DFSA using the DFSA's electronic prudential reporting system. Such submission must be in accordance with any instructions set out in the notice and any instructions provided through such a system or specified in this section and PRU.

### **Guidance**

The returns and instructional guidelines are provided in PRU and the DFSA's electronic prudential reporting system.

- 1.6.3** (1) The submission of any return must be accompanied by a Form B 100 (Declaration by Authorised Firms) signed by the Authorised Firm in the manner set out in (2) or (3) as applicable.
- (2) In relation to an annual return the form must be signed by two officers of the Authorised Firm each of whom is a Director, Partner or Person previously approved by the DFSA for that purpose.
- (3) In relation to a quarterly return the form must be signed by one officer of the Authorised Firm who is a Director, Partner or Person previously approved by the DFSA for that purpose.
- 1.6.4** An original signed hard copy of Form B 100 (Declaration by Authorised Firms), together with a copy of the return submitted to the DFSA must be kept for at least 6 years for inspection by the DFSA.
- 1.6.5** If the DFSA notifies an Authorised Firm, or the Authorised Firm itself forms the view, that a return that has been submitted to the DFSA appears to be inaccurate or incomplete, the Authorised Firm must consider the matter and within a reasonable time of the date of notification by the DFSA it must correct, if applicable, any inaccuracies and make good any omissions, and re-submit the relevant parts of the return.
- 1.6.6** (1) Subject to (2), (3), (4), (5), (6) and (7) an Authorised Firm must prepare and submit returns in accordance with Tables 2 and 3, which form part of this Rule.
- (2) An Authorised Firm which carries on business in or from the DIFC through a Branch is not required to prepare and submit forms B10 to B70.
- (3) A Domestic Firm is not required to prepare and submit form B90 and appendix 1 to B90.
- (4) A Category 4 Authorised Firm is not required to prepare and submit the appendices to form B10.
- (5) A Category 4 Authorised Firm operating as a Branch in the DIFC is not required to prepare and submit appendix 1 to form B90.
- (6) A Category 1, 2 or 3 Authorised Firm, operating an Islamic Window and Managing a PSIA must prepare and submit form B20 and its appendices and form B40, and is not required to prepare and submit form B30 or B10 and its appendices.
- (7) An Islamic Financial Institution in Category 2, 3 or 4 must prepare and submit form B20 and its appendices (wherever applicable) and form B40 and is not required to prepare and submit form B30 or B10 and its appendices.

- (8) All returns must be completed in thousands of USD.
  - (9) For the purposes of Tables 2 and 3, in the columns headed 'Frequency':
    - (a) the letter Q indicates that the relevant form must be prepared and submitted on a quarterly basis;
    - (b) the letter A indicates that the relevant form must be prepared and submitted on an annual basis;
    - (c) the letters A and Q together indicate that the relevant form must be prepared and submitted on both a quarterly and annual basis;
    - (d) the letter B indicates that the relevant form must be prepared and submitted on a six-monthly basis; and
    - (e) the letters N/A indicate that the form is not applicable to the category of Authorised Firm.
- 1.6.7** (1) An Authorised Firm must submit to the DFSA any annual return required by Tables 2 and 3, which forms part of this Rule, within four months of the end of the Authorised Firm's financial year.
- (2) An Authorised Firm must submit to the DFSA any other return required by Tables 2 and 3, which forms part of this Rule, within one month of the end of the reporting period to which the return relates.

**Table 2**

**REPORTING MATRIX BASED ON AUTHORISED FIRM CATEGORY**

Number	Name	Scope	Category 1 Authorised Firm	Category 2 Authorised Firm	Category 3 Authorised Firm	Category 4 Authorised Firm	Category 5 Authorised Firm
			Frequency	Frequency	Frequency	Frequency	Frequency
Form B10 & Appendices 1-4	Statement of Financial Position	Solo	A/Q	A/Q	A/Q	A/Q	N/A
		Consolidated	B	B	B	N/A	N/A
Form B20 & Appendices 1-9	Statement of Financial Position - Islamic Financial Institution	Solo	N/A	N/A	N/A	N/A	A/Q
		Consolidated	N/A	N/A	N/A	N/A	B
Form B30	Income Statement	Solo	A/Q	A/Q	A/Q	A/Q	N/A
		Consolidated	B	B	B	N/A	N/A
Form B40	Income Statement - Islamic Financial Institution	Solo	N/A	N/A	N/A	N/A	A/Q
		Consolidated	N/A	N/A	N/A	N/A	B
Form B50	Expenditure Based Capital Minimum	Solo	N/A	A/Q	A/Q	A/Q	N/A
Form B60	Capital Adequacy Schedule	Solo	A/Q	A/Q	A/Q	A/Q	A/Q
		Consolidated	B	B	B	N/A	B



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Form B70 & Appendix 1	Large Exposures Schedule	Solo	Q	Q	Q	N/A	Q
		Consolidated	B	B	B	N/A	B
Form B80	Liquidity Schedule – Maturity Mismatch	Solo	Q	N/A	N/A	N/A	Q
Form B90 & Appendix 1	Branch Return	Solo	A/Q	A/Q	A/Q	A/Q	A/Q
Form B120	Geographical Distribution of Assets & Liabilities	Solo	A/Q	A/Q	A/Q	N/A	A/Q
		Consolidated	B	B	B	N/A	B
Form B130	Provisions for Impairment	Solo	A/Q	N/A	N/A	N/A	A/Q
		Consolidated	B	N/A	N/A	N/A	B
Form B140	Exposures in Arrears	Solo	A/Q	N/A	N/A	N/A	A/Q
		Consolidated	B	N/A	N/A	N/A	B



**Table 3**

**REPORTING MATRIX BASED ON AUTHORISED FIRM LICENSED FINANCIAL SERVICE**

<b>Number</b>	<b>Name</b>	<b>Applicable to the Authorised Firms licensed to conduct the following Financial Services</b>	<b>Scope</b>	<b>Frequency</b>
Form B150	Investment Activity Schedule	Dealing in Investments as Principal Providing Credit Accepting Deposits Managing a PSIA	Solo	A/Q
Form B160	Credit Activity Schedule	Providing Credit Dealing in Investments as Principal	Solo	A/Q
Form B170	Acceptance of Deposits Schedule	Accepting Deposits	Solo	A/Q
Form B180	Wealth Management Activity	Managing Assets Arranging Credit or Deals in Investments Advising on Financial Products or Credit	Solo	A/Q
Form B190	Asset Management, Custody and Trust Services	Managing Assets Providing Custody Arranging Custody Providing Trust Services Arranging Credit or Deals in Investments Advising on Financial Products or Credit	Solo	A/Q
Form B200	Brokerage Activity	Dealing in Investments as Agent Arranging Credit or Deals in Investments	Solo	A/Q
Form B210	Outward Remittances	Accepting Deposits	Solo	A/Q

Form B220	Inward Remittances	Accepting Deposits	Solo	A/Q
Form B230	Domestic Fund Activity	Managing a Collective Investment Fund	Solo	A/Q
Form B240	Balances Due from and Due to Head Office, Own Branches and Other Banks	Accepting Deposits	Solo	A/Q
Form B260	Acting as a Trustee of a Fund and Fund Administration Activity	Acting as the Trustee of a Fund Providing Fund Administration	Solo	A/Q
Form B270	Related Party Transactions	Applicable to all the Authorised Firms	Solo	A/Q

## 1.7 Report to the DFSA

### Guidance

In accordance with Article 74, the DFSA may require an Authorised Firm to provide the DFSA with a report prepared by a Person nominated or approved by the DFSA in relation to the Authorised Firm's capital adequacy, systems and controls or any other prudential issue.

**Table 4**

**APPLICATION OF RULES TO CATEGORIES OF AUTHORISED FIRMS**

**Guidance**

1. This is the Table referred to in Guidance note 3 under Rule 1.1.1. This table is for guidance purposes only. The Rules apply to Authorised Firms in accordance with Chapter 1 and the application Rules in each chapter.
2. With regard to Authorised Firms carrying on Islamic Financial Business, there are additional matters that should be included in their report to the DFSA which are in the Islamic Finance Rules (IFR) module (see section 5.4 of IFR module).

Chapter						
		Category 1	Category 2	Category 3	Category 4	Category 5
1	General requirements					
1.1	Application	✓	✓	✓	✓	✓
1.2	Financial resources	✓	✓	✓	✓	✓
1.3	Categories of Authorised Firms	✓	✓	✓	✓	✓
1.4	The trading book	✓	✓	✓	✓	✓
1.5	Reporting	✓	✓	✓	✓	✓
1.6	Submission of returns	✓	✓	✓	✓	✓
1.7	Report to the DFSA	✓	✓	✓	✓	✓
App1		✓	✓	✓	✓	✓
2	Capital					
2.1	Application	✓	✓	✓	✓	✓
2.2	Basic requirements	✓	✓	✓	✓	✓
2.3	Initial and ongoing Capital Requirements	✓	✓	✓	✓	✓
2.4	Base Capital Requirement	✓	✓	✓	✓	✓
2.5	Expenditure Based Capital Minimum		✓	✓	✓	
2.6	Calculation of Capital Resources	✓	✓	✓	✓	✓
2.7	Components of capital	✓	✓	✓	✓	✓
2.8	Limits on the use of different forms of Capital	✓	✓	✓	✓	✓
2.10	Subordinated debt	✓	✓	✓	✓	
App2		✓	✓	✓	✓	✓
4	Credit Risk					
4.1	Application	✓	✓	✓		✓
4.2	Credit Risk systems and controls	✓	✓	✓		✓
4.3	Credit Risk in the Non-Trading Book	✓	✓	✓		✓
4.4	Counterparty Risk in the Trading Book	✓	✓	✓		✓
4.5	Concentration Risk	✓	✓	✓		✓
4.6	Collateral	✓	✓	✓		✓
4.7	Netting	✓	✓	✓		✓
4.8	Securitisation	✓	✓	✓		✓
4.9	Credit Derivatives	✓	✓	✓		✓
4.10	Application of Credit Risk methodology to Islamic Contracts	✓*	✓*	✓*		✓
App4		✓	✓	✓		✓

**PRUDENTIAL – INVESTMENT, INSURANCE INTERMEDIATION AND BANKING (PIB)**

Chapter						
		Category 1	Category 2	Category 3	Category 4	Category 5
5	Market Risk					
5.1	Application	✓	✓	✓		✓
5.2	Market Risk systems and controls	✓	✓			✓
5.3	Use of internally developed Market Risk models	✓	✓			✓
5.4	Interest Rate Risk Capital Requirement	✓	✓			
5.5	Equity Risk Capital Requirement	✓	✓			✓
5.6	Foreign Exchange Risk Capital Requirement	✓	✓	✓		✓
5.7	Commodity Risk Capital Requirement	✓	✓			✓
5.8	Option Risk Capital Requirement	✓	✓			✓
5.9	Securities Underwriting Capital Requirement	✓	✓			✓
App5		✓	✓	✓		✓
6	Liquidity Risk					
6.1	Application	✓	✓			✓
6.2	Liquidity systems and controls	✓	✓			✓
6.3	Liquidity requirements	✓				✓
App6		✓	✓			✓
7	Group Risk					
7.1	Application	✓**	✓**	✓**	✓**	✓**
7.2	Systems and controls requirements	✓** +	✓** +	✓** +		✓** +
7.3	Financial Group Capital Requirements and Financial Group Capital Resources	✓**	✓**	✓**		✓**
7.4	Financial Group Concentration Risk limits	✓**	✓ **	✓**		✓**
8	Operational Risk					
App7	Forms	✓	✓	✓	✓	✓
*	Where the Authorised Firm operates an Islamic Window or invests in or holds Islamic Contracts.					
**	The requirements apply where the Authorised Firm is a member of a Financial Group					
+	The requirements apply where the Authorised Firm is a member of a Group					

## **2 CAPITAL**

### **2.1 Application**

- 2.1.1** (1) This chapter applies to every Authorised Firm in accordance with (2), (3) and (4).
- (2) Sections 2.2 – 2.8 apply to an Authorised Firm in Category 1, 2, 3, 4 or 5.
- (3) Section 2.9 also applies to an Authorised Firm Managing a PSIA.
- (4) Section 2.10 also applies to an Authorised Firm in Category 1, 2, 3 or 4.

### **2.2 Basic requirements**

- 2.2.1** An Authorised Firm must have, at all times, Capital Resources of at least the amount of its Capital Requirement.

#### **Guidance**

If the DFSA considers that a higher capital requirement may be appropriate for a particular Authorised Firm, the DFSA may impose higher requirements by the imposition of a condition on the relevant firm's licence.

- 2.2.2** An Authorised Firm must have systems and controls to enable it to determine and monitor:
- (a) its Capital Requirement; and
- (b) whether the amount of its Capital Resources is, and is likely to remain at least equal to the amount of its Capital Requirement.
- 2.2.3** An Authorised Firm's systems and controls for the purposes of Rule 2.2.2 must include an analysis of:
- (a) realistic scenarios which are relevant to the circumstances of the Authorised Firm; and
- (b) the effects on the Capital Requirements of the Authorised Firm and on its Capital Resources if those scenarios occurred.

**Guidance**

1. App2 provides Guidance on the nature and type of stress and scenario testing that Authorised Firms should be undertaking to support their view that they have adequate financial resources to meet their obligations.
2. The requirements in this chapter apply to Authorised Firms on a solo basis. An Authorised Firm may also be subject to Capital Resources requirements at a Group level. Group requirements are addressed in chapter 7.

**2.2.4** An Authorised Firm must notify the DFSA immediately and confirm in writing of any breach, or expected breach, of any of the provisions of this chapter.

**Guidance**

For the purposes of section 2.2, an Authorised Firm should have systems and controls in place to enable it to be certain that it has adequate Capital Resources to comply with Rule 2.2.1 at all times. An Authorised Firm's systems and controls should be such as to allow it to demonstrate its capital adequacy at any particular time if required to do so by the DFSA. Where through the operation of those systems and controls an Authorised Firm forms the view that it may not be able to satisfy the requirements of Rule 2.2.1 in the future, that Authorised Firm is required to immediately inform the DFSA in accordance with Rule 2.2.4.

## **2.3 Initial and ongoing capital requirements**

**2.3.1** An Authorised Firm's Capital Requirement is the highest of:

- (a) the applicable Base Capital Requirement as set out in section 2.4;
- (b) in respect of an Authorised Firm in Category 2, 3 and 4, the Expenditure Based Capital Minimum as set out in section 2.5; or
- (c) 125% of the sum of the Credit Risk Capital Requirement, the Market Risk Capital Requirement and, for an Authorised Firm Managing a PSIA, the Displaced Commercial Risk Capital Requirement, calculated in accordance with chapter 5 of the Islamic Finance Rules (IFR) Module.

**Guidance**

1. An Authorised Firm will need to refer to chapters 4 and 5 to determine whether it is required to calculate a Credit Risk Capital Requirement and a Market Risk Capital Requirement, respectively. The Market Risk Capital Requirement will generally not be applicable to an Authorised Firm in Category 4.
2. The Displaced Commercial Risk Capital Requirement will only apply to an Authorised Firm Managing a PSIA.
3. An Authorised Firm will also need to consider the relevant provisions in IFR chapter 5 when calculating its Credit Risk and Market Risk for Islamic Contracts.

**2.3.2** An Authorised Firm must have initial Tier One Capital, as defined in section 2.6, of not less than the relevant Base Capital Requirement set out in section 2.4 at the time that it obtains authorisation.

**Credit risk capital requirement**

**2.3.3** An Authorised Firm must calculate its Credit Risk Capital Requirement as the sum of:

- (a) the Credit Risk Capital Component; and
- (b) the Counterparty Risk Capital Component.

**Guidance**

1. Detailed Rules and Guidance in respect of the Credit Risk Capital Requirement are contained in chapter 4.
2. Rules and Guidance in respect of calculating Credit Risk for Islamic Contracts are contained in IFR chapter 5.

**Market risk capital requirement**

**2.3.4** An Authorised Firm must calculate its Market Risk Capital Requirement as the sum of:

- (a) the Interest Rate Risk Capital Requirement;
- (b) the Equity Risk Capital Requirement;
- (c) the Foreign Exchange Risk Capital Requirement;
- (d) the Commodities Risk Capital Requirement;
- (e) the Options Risk Capital Requirement; and
- (f) the Securities Underwriting Capital Requirement.

**Guidance**

1. Detailed Rules and Guidance in respect of the Market Risk Capital Requirement and the components set out in Rule 2.3.4 are contained in chapter 5.
2. Rules and Guidance in respect of calculating Market Risk for Islamic Contracts are contained in IFR chapter 5.

**Displaced commercial risk**

**2.3.5** An Authorised Firm Managing a PSIA must calculate its Displaced Commercial Risk Capital Requirement in accordance with IFR chapter 5.

## **2.4 Base capital requirement**

**2.4.1** The table below sets out the Base Capital Requirement.

<b>Category</b>	<b>Base Capital Requirement</b>
Category 1	US \$10 million
Category 2 other than those Category 2 Authorised Firms included elsewhere in this table.	US \$2 million
Category 3 other than those Category 3 Authorised Firms included elsewhere in this table.	US \$500,000
Category 2 or 3 Acting as the Trustee of a Fund or Providing Custody for a Fund.	US \$4 million
Category 4	US \$ 10,000
Category 5	US \$10 million

## **2.5 Expenditure based capital minimum**

**2.5.1** An Authorised Firm in Category 2, 3 or 4 must calculate its Expenditure Based Capital Minimum as:

- (a) in the case of an Authorised Firm which holds Client Money or Insurance Money, 18/52;
- (b) in the case of an Authorised Firm in Category 2 or 3 which does not hold Client Money or Insurance Money, 13/52; or
- (c) in the case of an Authorised Firm in Category 4, which does not hold Insurance Money, 6/52;

of the Annual Audited Expenditure, calculated in accordance with Rule 2.5.2.

**2.5.2** (1) Annual Audited Expenditure is all expenses and losses that arise in the Authorised Firm's normal course of business, excluding exceptional items, and which are recorded in the Authorised Firm's audited profit and loss account, less the following items (if they are included in the Authorised Firm's audited profit and loss account):

- (a) staff bonuses, except to the extent that they are non-discretionary;



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- (b) employees' and directors' shares in profits, including share options, except to the extent that they are non-discretionary;
  - (c) other appropriations of profits, except to the extent that they are automatic;
  - (d) shared commissions payable that are directly related to commissions receivable;
  - (e) interest charges in respect of borrowings made to finance the acquisition of the Authorised Firm's readily realisable investments;
  - (f) interest paid to clients on Client Money or Insurance Money;
  - (g) interest paid to counterparties in the Trading Book;
  - (h) fees, brokerage and other charges paid to clearing houses, exchanges and intermediate brokers for the purposes of executing, registering or clearing transactions;
  - (i) foreign exchange losses; and
  - (j) contributions to charities.
- (2) For the purposes of (1)(c) a management charge must not be treated as an appropriation of profits.

**2.5.3** (1) For the purposes of Rule 2.5.2 an Authorised Firm must calculate its relevant Annual Audited Expenditure with reference to the Authorised Firm's most recent audited financial statements.

- (2) If an Authorised Firm:
- (a) has not produced audited financial statements or its most recent audited financial statements do not represent a twelve month trading period;
  - (b) has a material change in its expenditure (either up or down); or
  - (c) has varied its authorised activities;

it must adjust its relevant Annual Audited Expenditure requirement by agreement with the DFSA.

## **2.6 Calculation of capital resources**

**2.6.1** (1) An Authorised Firm must calculate its Capital Resources in accordance with the table in Rule 2.6.2 and the provisions in sections 2.7 to 2.10.

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- (2) A ✓ in the table in Rule 2.6.2 denotes that the item is included in the calculation of an Authorised Firm's Capital Resources, whereas an X denotes that the item is not included.

**Guidance**

The DFSA may recognise forms of capital instruments in addition to those set out in the table in Rule 2.6.2 for inclusion in an Authorised Firm's Capital Resources where those instruments comply with accepted international standards.

**2.6.2** The table referred to in Rule 2.6.1 and forming part of this Rule is set out below:

	<b>Categories 1 – 4</b>	<b>Category 5</b>
<b>(A) TIER ONE CAPITAL:</b>		
Permanent share capital	✓	✓
Partnership capital	✓	✓
Audited reserves	✓	✓
Share premium account	✓	✓
Externally verified interim net profits	✓	✓
<b>(B) DEDUCTIONS FROM TIER ONE CAPITAL:</b>		
Investments in own shares	✓	✓
Intangible assets	✓	✓
Interim net losses	✓	✓
Excess of drawings over profits (for partnerships)	✓	✓
<b>(C) TIER ONE CAPITAL AFTER DEDUCTIONS = A-B</b>		
<b>(D) UPPER TIER TWO CAPITAL:</b>		
Perpetual qualifying hybrid capital instruments	✓	X
Fixed dividend ordinary shares	✓	X
Revaluation reserves	✓	✓
General provisions	✓	✓
Profit equalisation reserve	✓	✓
Investment risk reserve	✓	✓
<b>(E) LOWER TIER TWO CAPITAL:</b>		
Subordinated debt	✓	X
<b>(F) TOTAL TIER ONE CAPITAL PLUS TIER TWO CAPITAL = C+D+E</b>		
<b>(G) DEDUCTIONS FROM TOTAL OF TIER ONE AND TWO CAPITAL:</b>		
Investments in subsidiaries and associates	✓	✓
Connected lending of a capital nature	✓	✓
Material holdings of capital instruments issued by Regulated Financial Institutions	✓	✓
Qualifying holdings in non-financial companies	✓	✓
Illiquid assets	✓ **	X
<b>(H) TOTAL TIER ONE CAPITAL PLUS TIER TWO CAPITAL AFTER DEDUCTIONS = F-G = TOTAL CAPITAL RESOURCES</b>		
** Authorised Firms in Categories 2 – 4 are required to deduct illiquid assets (see Rule 2.7.8)		

## 2.7 Components of capital

- 2.7.1** (1) For the purposes of the table in Rule 2.6.2:
- (a) Permanent Share Capital means ordinary paid-up share capital or members' equity or equivalent however called which meets the following conditions:
    - (i) it is fully paid up;
    - (ii) any dividends in relation to it are non-cumulative;
    - (iii) it is available to absorb losses on a going concern basis;
    - (iv) it ranks for repayment upon winding up or insolvency after all other debts and liabilities;
    - (v) it is undated;
    - (vi) the proceeds of an issue of Permanent Share Capital is immediately and fully available to the Authorised Firm;
    - (vii) the Authorised Firm is not obliged to pay any dividends on the shares (except in the form of shares that themselves comply with this Rule);
    - (viii) the Authorised Firm does not have any other obligation or commitment to transfer any economic benefit in relation to that Permanent Share Capital; and
    - (ix) dividends and other charges on the shares can only be paid out of accumulated realised profits.
  - (b) Partnership capital is made up of the partners' capital account which is an account:
    - (i) into which capital contributed by the Partners is paid; and
    - (ii) from which under the terms of the partnership agreement an amount representing capital may be withdrawn by a Partner only if:
      - (A) he ceases to be a Partner and an equal amount is transferred to another such account by his former Partners or any person replacing him as their Partner; or
      - (B) the partnership is otherwise dissolved or wound up.

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- (c) Audited reserves are audited accumulated profits retained by the Authorised Firm after deduction of tax and dividends, and other reserves created by appropriations of share premiums and similar realised appropriations;
  - (d) audited reserves also include capital contributions if those contributions:
    - (i) meet the requirements of Rule 2.7.1(a); and
    - (ii) the Authorised Firm has notified the DFSA at least one month before the inclusion of the capital contributions of its intention to include them;
  - (e) cumulative losses and other negative reserves must be deducted from Tier One Capital; and
  - (f) externally verified interim net profits are interim profits verified by an Authorised Firm's external auditor net of tax, anticipated dividends or other appropriations; and
  - (g) intangible assets include goodwill, capitalised development costs, brand names, trademarks and similar rights, licences, and exchange seats held as part of the Authorised Firm's trading requirement.
- (2) Partnership capital is eligible for inclusion in Tier One Capital only to the extent that it is permanent and there is no obligation, that cannot be cancelled, to pay costs.

**Guidance**

The DFSA may request an Authorised Firm to provide it with a copy of its external auditor's opinion referred to in Rule 2.7.1(1)(f) on whether the interim profits are reasonably stated.

**Perpetual qualifying hybrid capital instruments**

**2.7.2** An Authorised Firm may only include perpetual qualifying hybrid capital instruments as part of its upper Tier Two Capital if:

- (a) the instrument is perpetual;
- (b) it is available to absorb losses on a going concern basis; and
- (c) in the case of perpetual subordinated debt, it meets the general conditions set out in section 2.10.

### **General provisions**

- 2.7.3** (1) An Authorised Firm must ensure that the value of general provisions included in Tier Two Capital does not exceed 15% of the total Capital Resources calculated in accordance with Rule 2.6.1.
- (2) General provisions are provisions that:
- (a) an Authorised Firm holds against potential losses not yet specifically identified, but which experience indicates are present in the Authorised Firm's portfolio of assets; and
  - (b) are verified by the Authorised Firm's external auditors and disclosed in the Authorised Firm's annual report and accounts.

### **Investments in subsidiaries and associates**

- 2.7.3A** The deduction made at G in the Table in Rule 2.6.2 in respect of a Subsidiary or Associate that is an Authorised Firm or a Financial Institution must be the greater of:
- (a) the amount of the Authorised Firm's investment in the Subsidiary or Associate; and
  - (b) the amount of the Authorised Firm's proportionate share in the Capital Requirement of the Subsidiary or Associate, determined in accordance with Rule 7.3.3(2).

#### **Guidance**

The impact of Rule 2.7.3A is that, where a Subsidiary or Associate has a Capital Requirement that exceeds the amount of its book value to the Authorised Firm, the Authorised Firm ring-fences additional capital resources to ensure that the same capital resources are not available to support the capital adequacy of the Authorised Firm itself.

### **Connected lending of a capital nature**

- 2.7.4** An Authorised Firm must deduct connected lending of a capital nature from the total of Tier One and Tier Two Capital.

#### **Guidance**

The DFSA regards connected lending of a capital nature to be any lending to a company in the same Group as the Authorised Firm for activities which that company would find hard to finance from another source, and is typically on a long term basis. Unless there is a genuine ability for the funds to be repaid within a short time, it is generally considered that the loan is of a capital nature.

### **Material holdings**

- 2.7.5** For the purposes of the table in Rule 2.6.2 a material holding of capital instruments issued by a Regulated Financial Institution is:

- (a) an Authorised Firm's holdings of shares or any other interest in the capital of a Regulated Financial Institution (held in the Non-Trading Book or the Trading Book or both) exceeding 10% of the share capital of the issuer. Where this is the case, any holdings of a subordinated debt of the same issuer are included and the full amount of the holding of shares, capital and subordinated debt is the material holding;
- (b) an Authorised Firm's holdings of shares, any other interest in the capital or subordinated debt in a Regulated Financial Institution (held in the Non-Trading Book or the Trading Book or both) not included in (a) if the total amount of such holdings exceeds 10% of the Authorised Firm's total Tier One and Tier Two Capital before deductions from Tier One and Tier Two Capital. Where this is the case, the full amount of the holding of shares, capital and subordinated debt is the material holding; or
- (c) the aggregate of an Authorised Firm's holdings in the Non-Trading Book of shares, any other interest in the capital and subordinated debt in all other Regulated Financial Institutions not included in (a) or (b) if the total amount of such holdings exceeds 10% of the Authorised Firm's total Tier One and Tier Two Capital before deductions from Tier One and Tier Two Capital. Where this is the case, only the amount above 10% of the Authorised Firm's Tier One and Tier Two Capital Resources (calculated before deduction of its holdings) is a material holding.

#### **Guidance**

Holdings of capital instruments issued by Regulated Financial Institutions that are not material holdings are subject to Credit Risk Capital Requirements if held in the Non-Trading Book or Market Risk Capital Requirements if held in the Trading Book.

#### **Qualifying holdings**

- 2.7.6** (1) An Authorised Firm must deduct from the total of Tier One and Tier Two Capital the amount which is the greater of the following:
- (a) if the Authorised Firm has any Qualifying Holding in an Undertaking that exceeds 15% of the total of Tier One and Tier Two Capital, after the deduction of material holdings, but not the other deductions from the total of Tier One and Tier Two Capital, the sum of such excess amounts; or
  - (b) the amount by which the sum of each of the Authorised Firm's Qualifying Holdings exceeds 60% of the total of Tier One and Tier Two Capital, after the deduction of material holdings, but not the other deductions from the total of Tier One and Tier Two Capital.
- (2) A Qualifying Holding is any holding in the Capital of a non-financial Undertaking of which the Authorised Firm is a Controller. A non-financial

Undertaking is an Undertaking that is not a Regulated Financial Institution.

**2.7.7** An Authorised Firm is not required to carry out deductions in respect of Qualifying Holdings when:

- (a) the shares held are not held as investments;
- (b) the shares are held temporarily during the normal course of underwriting;  
or
- (c) the shares are held in the Authorised Firm's name on behalf of others.

**Illiquid assets**

**2.7.8** For the purposes of the table in Rule 2.6.2 illiquid assets are:

- (a) tangible fixed assets (except land and buildings if they are used by the Authorised Firm as security for loans, but only up to the value of the principal outstanding of the loans);
- (b) holdings in the capital of, and holdings of subordinated loans to, Regulated Financial Institutions except to the extent that:
  - (i) they have already been deducted as a material holding from the total of Tier One and Tier Two Capital; or
  - (ii) they are included in the Authorised Firm's Trading Book and included in the calculation of the Authorised Firm's Market Risk Capital Requirement;
- (c) holdings of other investments which are not readily realisable;
- (d) deficiencies of net assets in subsidiaries;
- (e) deposits which are not repayable within ninety days (except for payments in connection with margined futures or options contracts);
- (f) loans and other amounts owed to the Authorised Firm except where they are to be repaid within ninety days; and
- (g) physical stocks except for positions in physical commodities that are included in the calculation of the Authorised Firm's Market Risk Capital Requirement.

## **2.8 Limits on the use of different forms of capital**

### **Guidance**

The table in Rule 2.6.2 describes the following terms that are used in this section:

- a. 'Tier Two Capital' means the sum of line D and line E in the table;
- b. 'Tier One Capital after deductions' is equal to line C in the table;
- c. 'Lower Two Tier Capital' is equal to line E in the table; and
- d. 'Tier One Capital' is equal to line A in the table.

### **2.8.1** In the calculation of its Capital Resources, an Authorised Firm without a Trading Book must:

- (a) exclude Tier Two Capital to the extent that it exceeds two thirds of Tier One Capital after deductions; and
- (b) exclude Lower Tier Two Capital to the extent that it exceeds 50% of Tier One Capital.

### **2.8.2** (1) An Authorised Firm with a Trading Book which is a member of a Financial Group must:

- (a) in the calculation of its Financial Group Capital Resources:
  - (i) exclude Tier Two Capital to the extent that it exceeds two thirds of Tier One Capital after deductions; and
  - (ii) calculate its Financial Group Capital Resources in accordance with Rule 2.8.3; and
- (b) at a solo level, calculate its Capital Resources in accordance with Rule 2.8.3.

### (2) An Authorised Firm with a Trading Book which is not a member of a Financial Group must:

- (a) exclude Tier 2 Capital to the extent that it exceeds two thirds of Tier One Capital after deductions; and
- (b) calculate its Capital Resources in accordance with Rule 2.8.3.

### **2.8.3** An Authorised Firm with a Trading Book must:

- (a) ensure its Non-Trading Book Capital meets or exceeds its Non-Trading Book Capital Requirement by:



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- (i) designating part of its Tier One capital after deductions as supporting its Non-Trading Book (Tier One NTB);
  - (ii) designating part of its Tier Two Capital as supporting its Non-Trading Book (Tier Two NTB); and, as an element of this, designating part of its Lower Tier Two capital (Lower Tier Two NTB) as supporting its Non-Trading Book;
  - (iii) excluding from these amounts:
    - (A) Tier Two NTB to the extent that it exceeds two thirds of Tier One NTB; and
    - (B) Lower Tier Two NTB to the extent that it exceeds 50% of Tier One NTB; and
  - (iv) ensuring that Tier One NTB plus Tier Two NTB (reduced by any exclusions calculated pursuant to (iii)) exceeds its Non-Trading Book Capital Requirement as defined in Rule 2.8.4; and
- (b) calculate its Capital Resources by:
- (i) calculating the excess (Tier One TB) of its total Tier One Capital after deductions over its Tier One NTB designated in (a)(i);
  - (ii) calculating the excess (Tier Two TB) of its total Tier Two Capital over its Tier Two NTB (as reduced in (a)(iii));
  - (iii) excluding from its Tier Two TB:
    - (A) in the case of an Authorised Firm in Category 2, 3 or 4, any excess over 250% of Tier One TB; or
    - (B) in the case of an Authorised Firm in Category 1 or 5, any excess over 200% of Tier One TB; and
  - (iv) summing:
    - (A) Tier One capital after deductions;
    - (B) Tier Two NTB (as reduced in (a)(iii) above); and
    - (C) Tier Two TB (as reduced in (b)(iii) above);

and deducting the required deductions from the total of Tier One and Tier Two capital set out in line G of the table in Rule 2.6.2.

**2.8.4** For the purposes of Rule 2.8.3:

- (a) an Authorised Firm's Non-Trading Book Capital Requirement must be calculated as the sum of the following components, regardless of whether they were calculated taking into account Non-Trading Book items or Trading Book items:
  - (i) Credit Risk Capital Component calculated in accordance with section 4.3;
  - (ii) subject to Rule 2.8.5, the Foreign Exchange Risk Capital Requirement calculated in accordance with section 5.6; and
  - (iii) subject to Rule 2.8.6, Displaced Commercial Risk Capital Requirement calculated in accordance with IFR section 5.4; and
- (b) an Authorised Firm's Trading Book Capital Requirement must be calculated as the sum of the following components, regardless of whether they were calculated taking into account Non-Trading Book items or Trading Book items:
  - (i) Counterparty Risk Capital Component calculated in accordance with section 4.4;
  - (ii) Interest Rate Risk Capital Requirement calculated in accordance with section 5.4;
  - (iii) Equity Risk Capital Requirement calculated in accordance with section 5.5;
  - (iv) Commodity Risk Capital Requirement calculated in accordance with section 5.7;
  - (v) Option Risk Capital Requirement calculated in accordance with section 5.8; and
  - (vi) Securities Underwriting Capital Requirement calculated in accordance with section 5.9.

**2.8.5** For the purposes of Rule 2.8.4 an Authorised Firm which uses an internally developed model to determine its Foreign Exchange Risk Capital Requirement may include that item in its Trading Book Capital Requirement instead of its Non-Trading Book Capital Requirement.

**2.8.6** For the purposes of Rule 2.8.4, an Authorised Firm may include that part of its Displaced Commercial Risk Capital Requirement that relates to Market Risk in its Trading Book Capital Requirement instead of its Non-Trading Book Capital Requirement.

## **2.9 Components of capital specific to Authorised Firms Managing a PSIA**

### **Guidance**

This section is based on AAOIFI's FAS 11: Provisions and Reserves.

- 2.9.1** An Authorised Firm must exclude from Tier Two capital any amount by which the total of the Profit Equalisation Reserve and the Investment Risk Reserve exceeds the Displaced Commercial Risk Capital Requirement calculated in accordance with IFR Rule 5.4.4.

## **2.10 Subordinated debt**

- 2.10.1** (1) An Authorised Firm must not include subordinated debt as part of its Capital Resources unless it meets the following conditions:
- (a) the claims of the subordinated creditors must rank behind those of all unsubordinated creditors;
  - (b) no interest or principal may be payable:
    - (i) at a time when the Authorised Firm is in breach of solo or Group Capital Requirements; or
    - (ii) if the payment would mean that the Authorised Firm would be in breach of the Rules in PIB;
  - (c) the only events of default must be non-payment of any interest or principal under the debt agreement or the winding-up of the Authorised Firm;
  - (d) the remedies available to the subordinated creditor in the event of non-payment in respect of the subordinated debt must be limited to petitioning for the winding up of the Authorised Firm or proving for the debt and claiming in the liquidation of the Authorised Firm;
  - (e) any events of default and any remedy described in (d) must not prejudice the matters in (a) and (b);
  - (f) in addition to the requirements about repayment in (a) and (b), the subordinated debt must not become due and payable before its stated final maturity date except on an event of default complying with (c);
  - (g) the agreement and the debt are governed by an acceptable law;

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- (h) to the fullest extent permitted under the rules of the relevant jurisdictions, creditors must waive their right to set off amounts they owe the Authorised Firm against subordinated amounts owed to them by the Authorised Firm;
  - (i) the terms of the subordinated debt must be set out in a written agreement or instrument that contains terms that provide for the conditions set in (a) to (h);
  - (j) the debt must be unsecured and fully paid up; and
  - (k) the Authorised Firm has notified the DFSA in writing that it intends to include subordinated debt as part of its Capital Resources and the DFSA has not advised the Authorised Firm in writing within thirty days of the date of the notification that the subordinated debt must not form part of its Capital Resources.
- (2) An Authorised Firm must satisfy the requirement of paragraph 1(g) by obtaining an external legal opinion confirming that an appropriate degree of subordination has been achieved under the law that governs the debt that meets the requirements set out in this section.
- (3) An Authorised Firm must not include a subordinated debt issue with step-ups in the first five years following the date of issue, in its Capital Resources.
- (4) An Authorised Firm may include subordinated debt in its lower Tier Two Capital only if:
- (a) it has an Original Maturity of at least five years or is subject to five years' notice of repayment; and
  - (b) payment of interest or principal is permitted only if after such payment the Authorised Firm's Capital Resources would be greater than the amount required by Rule 2.2.1.

**2.10.2** For the purposes of calculating the amount of subordinated debt that may be included in its Capital Resources, an Authorised Firm must amortise the principal amount on a straight-line basis by 20% per annum in its final four years to maturity.

**Step-up in interest**

**2.10.3** For the purposes of this section, a step-up in interest means, in relation to any rate, dividend or similar payment:

- (a) in the case of a fixed rate, an increase in that rate; or
- (b) in any other case, any change in the way that the interest or other payment is calculated that may result in an increase in the amount payable at any time, including a change already provided in the original terms governing those payments.

**2.10.4** Where subordinated debt is subject to a step-up in interest, its final maturity is, for the purposes of this chapter, no later than the date that the first step-up can take effect, unless the total amount (taking into account all the step-ups) by which the rate of interest can exceed the amount it would have been without any step-up is no more than:

- (a) 50 basis points in the first ten years of the life of the subordinated debt; and
- (b) 100 basis points over the whole life of the subordinated debt.



**3 NOT CURRENTLY IN USE**

## **4 CREDIT RISK**

### **4.1 Application**

**4.1.1** This chapter applies to an Authorised Firm in Category 1, 2, 3 or 5.

#### **Guidance**

1. Rule 2.3.3 provides that the Credit Risk Capital Requirement of an Authorised Firm is calculated as the sum of:
  - a. the Credit Risk Capital Component; and
  - b. the Counterparty Risk Capital Component.
2. This chapter sets out the manner in which each of those components must be calculated, monitored and controlled by an Authorised Firm.
3. In addition to complying with the applicable Rules in chapter 4, an Authorised Firm investing in or holding Islamic Contracts whether or not for the purpose of a PSIA will need to take account of the provisions under IFR Rules 5.4.6 and 5.4.7 to calculate the Credit Risk for those Islamic Contracts.

**4.1.2** The following abbreviations are used in this chapter and in App4:

- (a) CCF = credit conversion factor;
- (b) CEA = the Credit Equivalent Amount;
- (c) CPCOM = the Counterparty Risk Capital Component;
- (d) CPW = the appropriate Counterparty weighting;
- (e) CPX = the amount of the Exposure;
- (f) CRCOM = the Credit Risk Capital Component;
- (g) CV = contracted value for delivery;
- (h) MV = market value;
- (i) NP = nominal principal amount;
- (j) OTC = over the counter;
- (k) PFCE = amount to capture Potential Future Credit Exposure; and
- (l) T = trade date which is the date on which a transaction is entered into.

## 4.2 Credit risk systems and controls

**4.2.1** Section 4.2 applies to an Authorised Firm with respect to both its Non-Trading Book and Trading Book transactions.

**4.2.2** (1) An Authorised Firm must develop, implement and maintain a Credit Risk policy which must be documented and:

- (a) provides sound, well-defined risk management criteria that are to be applied when granting credit;
- (b) clearly indicates the amount and nature of credit risk that the Authorised Firm wishes to incur;
- (c) sets out, where appropriate, the amounts and terms and conditions under which counterparties or clients may be eligible or ineligible for credit;
- (d) includes a provisioning policy approved by the Authorised Firm's Governing Body or other appropriate body within the Authorised Firm to which the Authorised Firm's Governing Body has delegated this responsibility (i.e. the Governing Body's delegate);
- (e) sets out adequate procedures for handling conflict of interests relating to the provision and management of credit, including measures to prevent any Person directly or indirectly benefiting from the credit being part of the process of granting or managing the credit;
- (f) subject to (2), prohibits exposures to Related Persons on terms that are more favourable than those available to Persons who are not Related Persons;
- (g) if exposures to Related Persons are allowed on terms which are no more favourable than those available to Persons who are not Related Persons, sets out procedures that:
  - (i) require such exposures, and any write-off of such exposures exceeding specific amounts or otherwise posing special risks to the Authorised Firm, to be made subject to the prior written approval of the Authorised Firm's Governing Body or the Governing Body's delegate; and
  - (ii) exclude Persons directly or indirectly benefiting from the grant or write off of such exposures being part of the approval process.



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- (2) The prohibition in (1)(f) does not apply to providing credit to a Related Person under a credit policy on terms (such as for credit assessment, tenor, interest rates, amortisation schedules and requirements for collateral) that are more favourable than those on which it provides credit to Persons who are not Related Persons, provided the credit policy:
- (a) is an Employee credit policy that is widely available to Employees of the Authorised Firm;
  - (b) is approved by the Authorised Firm's Governing Body or the Governing Body's delegate;
  - (c) clearly sets out the terms, conditions and limits (both at individual and aggregate levels) on which credit is to be provided to such Employees; and
  - (d) requires adequate mechanisms to ensure on-going compliance with the terms and conditions of that credit policy, including immediate reporting to the Governing Body or the Governing Body's delegate where there is a deviation from or a breach of the terms and conditions or procedures applicable to the provision of such credit for timely and appropriate action.
- (3) For the purposes of this Rule, a Person is a "Related Person" of an Authorised Firm if the Person:
- (a) is, or was in the past 2 years:
    - (i) a member of a Group or Partnership in which the Authorised Firm is or was also a member; or
    - (ii) a Controller of the Authorised Firm or a Close Relative of such a Controller;
  - (b) is, or was in the past 2 years, a Director, Partner or senior manager of the Authorised Firm or an entity referred to under (a)(i) or (ii), or a Close Relative of such a Director, Partner or senior manager; or
  - (c) is an entity in which a Director, Partner or senior manager of the Authorised Firm or an entity referred to in (a)(i) or (a)(ii), or a Close Relative of such a Director, Partner or senior manager has a significant interest by:
    - (i) holding 20% or more of the shares of that entity, or a Parent of that entity, if that entity is a company; or
    - (ii) being entitled to exercise 20% or more of the voting rights in respect of that entity;

except that a Partner is not a Related Person where that Person is a limited partner of a Limited Partnership formed under the Limited Partnership Law of 2006 or any similar limited partnership constituted under the law of a country or territory outside the DIFC.

- (4) An Authorised Firm must ensure that its risk management systems enable it to:
  - (a) implement the Credit Risk policy; and
  - (b) identify, measure, monitor and control its Credit Risk.
- (5) An Authorised Firm must, at intervals that are appropriate to the nature, scale and complexity of its activities, review and update the Credit Risk policy.

#### **Guidance**

- 1. The appropriate level at which credit decisions are taken will vary according to the type of credit offered and the size and structure of the Authorised Firm. For some Authorised Firms, a credit committee may be appropriate, with formal terms of reference laid down. In other Authorised Firms, individuals may be given pre-assigned authority limits. It will usually be appropriate for the final credit approval authority to be given by staff reporting independently from those staff interacting with clients.
- 2. Further Guidance on Credit Risk systems and controls, and on the specific areas which the Credit Risk policy should cover, are set out in section A4.2.
- 3. The requirements in Rule 4.2.2(2) do not prevent arrangements such as Employee loan schemes that allow more favourable and flexible loan terms to Employees of the Authorised Firm than those available under its normal commercial arrangements. However, such a loan scheme must comply with the requirements set out in these Rules, which are designed to address conflicts of interests that may arise in the grant, approval or management of such loans. Such conflicts are especially likely to arise where one or more of the Employees concerned are Directors, Partners or senior managers.
- 4. Generally, where an Authorised Firm has an Employee loan scheme under Rule 4.2.2(2), the DFSA expects its Governing Body to have ensured, before it or its delegate approved that scheme, that the terms, conditions and particularly limits (both at individual and aggregate level) on which credit is to be provided to Employees under the scheme are adequate and effective in addressing the risks arising from such lending. The Authorised Firm should also be able to demonstrate to the DFSA that the procedures it has adopted relating to an Employee loan scheme are adequate to address any risks arising from such lending. The DFSA expects to have access to records relating to lending under an Employee loan scheme upon request or during its supervisory visits. Any significant breach of or deviation from the procedures adopted in relation to an Employee loan scheme may also trigger the reporting requirements to the DFSA under GEN Rule 11.10.7.

### **4.3 Credit risk in the non-trading book**

- 4.3.1** (1) Section 4.3 applies to an Authorised Firm only in respect of its Non-Trading Book transactions and any transactions or balances not dealt with in section 4.4 (relating to the Counterparty Risk in the Trading Book) or chapter 5.
- (2) Section 4.3 does not apply to an Authorised Firm in respect of items deducted from an Authorised Firm's Capital Resources.

#### **Guidance**

1. An Authorised Firm should have regard to sections A4.3 and A4.4 in conjunction with this section. In particular, section A4.3 sets out Rules relating to the calculation of CPW and CCF and section A4.4 sets out Rules relating to the measurement of Original Maturity.
2. Much of the detail in section 4.3 and the relevant parts of App4 may not be applicable to an Authorised Firm in Prudential Category 3. Nevertheless, such an Authorised Firm should calculate the Credit Risk Capital Component by applying the appropriate risk weightings and Credit Conversion Factors.
3. An Authorised Firm with a Trading Book also needs to take into account the Counterparty Risk Component, as set out in section 4.4
4. The requirements in this and all other sections of chapter 4 apply to an Authorised Firm on a solo basis. Additional requirements for an Authorised Firm which is part of a Financial Group or Group are set out in chapter 7.

**4.3.2** An Authorised Firm must calculate its CRCOM by:

- (a) identifying all the items to which the CRCOM calculation applies;
- (b) valuing each item to which the CRCOM calculation applies;
- (c) reducing the value of any items, at its discretion, by any one or more of the following:
  - (i) the amount of any specific provision made, where the provision relates to the risk of a credit loss occurring on that item and is not held as part of a general provision or reserve against the Authorised Firm's Credit Risks;
  - (ii) netting its claims on and liabilities to a Counterparty provided that the conditions in section 4.7 are met;
  - (iii) the amount of Acceptable Collateral held, provided that the enforceability requirements in section 4.6 are met; or

- (iv) the value of a Credit Derivative, where the Credit Derivative is an instrument included in section 4.9 and the transaction meets the conditions set out in that section;
- (d) calculating the CRCOM for each item according to whether it is an:
  - (i) on-balance sheet item in accordance with Rule 4.3.3;
  - (ii) off- balance sheet item in accordance with Rule 4.3.4; or
  - (iii) Unsettled Transaction, a free delivery or an OTC derivative in accordance with Rule 4.3.5; and
- (e) summing of the CRCOMs calculated for each item.

#### **On-balance sheet items**

- 4.3.3** (1) An Authorised Firm must calculate its CRCOM for an on-balance sheet item by using the following formula:  $CRCOM = CPX \times CPW \times 8\%$ .
- (2) For the purposes of (1) an Authorised Firm must determine the CPW for each on-balance sheet item in accordance with Rules A4.3.5 to A4.3.9.

#### **Guidance**

Before completing the calculation in Rule 4.3.3(1), an Authorised Firm needs to take account of the adjustments regarding the reduction in the risk weighting on non-trading book items where they are the subject of appropriate guarantees in accordance with the Rules in section A4.3.

#### **Off-balance sheet items**

- 4.3.4** (1) Subject to Rule 4.3.5, an Authorised Firm must calculate its CRCOM for an off-balance sheet item by using the following formula:  $CRCOM = NP \times CCF \times CPW \times 8\%$ .
- (2) For the purposes of (1), an Authorised Firm must determine the CCF for each off-balance sheet item in accordance with Rules A4.3.10 to A4.3.14.
- (3) For the purposes of (1), an Authorised Firm must determine the CPW for each off-balance sheet item in accordance with Rules A4.3.15 to A4.3.17.
- (4) For the purposes of (1), NP is the overall amount of an off-balance sheet commitment to which an Authorised Firm is exposed.

#### **Guidance**

The Credit Risk for off-balance sheet transactions, other than OTC derivative contracts, free deliveries and Unsettled Transactions, is measured by multiplying the NP by a CCF. The resultant figure is then multiplied by the CPW and 8%. This formula is used to convert off- balance sheet nominal Exposures to a level which allows comparison with on-balance sheet Exposures for risk weighting purposes.

**Unsettled transactions, free deliveries and OTC derivatives**

- 4.3.5** (1) Rule 4.3.4 does not apply to Unsettled Transactions, free deliveries or OTC derivative contracts.
- (2) An Authorised Firm must calculate its CRCOM for Unsettled Transactions, free deliveries and OTC derivative contracts in accordance with the Rules in section A4.5.

**4.4 Counterparty risk in the trading book****Guidance**

This section should be read in conjunction with the Rules in sections A4.5, A4.6 and A4.7 which set out the Rules in respect of the calculation of CPCOM for particular items.

- 4.4.1** This section applies to an Authorised Firm in respect of its Trading Book transactions.

**Guidance**

An Authorised Firm with a Non-Trading Book also needs to take into account the Credit Risk Component under section 4.3.

- 4.4.2** An Authorised Firm with a Trading Book must calculate its CPCOM by:
- (a) identifying all the items to which the CPCOM calculation applies;
  - (b) valuing each item to which the CPCOM calculation applies;
  - (c) reducing the value of any items, at its discretion, by any one or more of the following:
    - (i) the amount of any specific provision made, where the provision relates to the risk of a credit loss occurring on that item and is not held as part of a general provision or reserve against the Authorised Firm's Credit Risks;
    - (ii) netting its claims on and liabilities to a Counterparty provided that the conditions in section 4.7 are met;
    - (iii) the amount of Acceptable Collateral held, provided that the enforceability requirements in section 4.6 are met; and
    - (iv) the value of a Credit Derivative where the Credit Derivative is an instrument included in section 4.9 and the transaction meets the conditions set out in that section;

- (d) calculating the CPCOM for each item according to whether it is:
  - (i) an Unsettled Transaction, a free delivery, or an OTC derivative;
  - (ii) a repurchase agreement, reverse repurchase agreement, similar transactions, and a deferred settlement; or
  - (iii) another Trading Book transaction; and
- (e) summing of the CPCOMs calculated for each item.

**Guidance**

If an Authorised Firm chooses not to reduce the amount of an item by the amount of any specific provision made on it, the Authorised Firm will receive a higher capital charge on the item than it would otherwise.

**4.4.3** An Authorised Firm must calculate its CPCOM for each item referred to in Rule 4.4.2(d) in accordance with the Rules in sections A4.5, A4.6 and A4.7 respectively.

**4.5 Concentration risk**

**4.5.1** This section applies with respect to Trading Book transactions and Non-Trading Book transactions.

**4.5.2** Subject to IFR Rule 5.4.8, an Authorised Firm must ensure that Exposures in its Non-Trading Book to a Counterparty or to a group of Closely Related Counterparties or to a group of Connected Counterparties do not exceed 25% of its Capital Resources.

**4.5.3** Where an Authorised Firm's Trading Book Exposure to a Counterparty or to a group of Closely Related Counterparties or to a group of Connected Counterparties, on its own or when added to any Non-Trading Book Exposure, is likely to exceed 25% of its Capital Resources, the Authorised Firm must immediately give the DFSA written notice, explaining the nature of its Trading Book Exposure and seeking specific guidance from the DFSA regarding the prudential treatment of any such Exposure.

**4.5.4** Subject to IFR Rule 5.4.9, an Authorised Firm must ensure that the sum of its non-exempt Large Exposures does not exceed 800% of its Capital Resources.

**Guidance**

1. Exposures can arise in the Non-Trading Book and in the Trading Book from Credit Risk (for example on loans and advances) Counterparty Risk (for example, on unsettled trades and on derivative contracts) and from issuer risk (for example, on holdings of equities and bonds).

2. Some derivatives contracts may result in an Authorised Firm being exposed to an Issuer as well as the derivatives Counterparty. For example, a derivative referenced on a Security may result in an Exposure to the Counterparty to the transaction and to the Issuer of the underlying Security.
3. Examples of an Exposure are actual or potential claims on a Counterparty including contingent liabilities arising in the normal course of an Authorised Firm's business.
4. App4 (A4.8) includes further Rules and Guidance on:
  - a. fully and partially exempt Exposures, Exposures to undisclosed Counterparties, parental guarantees and capital maintenance agreements;
  - b. identification of Exposures;
  - c. identification of Closely Related and Connected Counterparties, and exemptions for Connected Counterparties;
  - d. measuring Exposures to Counterparties and issuers in relation to derivatives, equity indices, and other items; and
  - e. country risk exposure.

**4.5.5** For the purposes of this section, Exposure excludes:

- (a) claims and other assets required to be deducted for the purposes of calculating an Authorised Firm's Capital Resources;
- (b) a transaction entered into by an Authorised Firm as depository or as agent that does not create any legal liability on the part of the Authorised Firm;
- (c) claims resulting from foreign exchange transactions where an Authorised Firm has paid its side of the transaction and the countervalue remains unsettled during the 2 business days following the due payment or due delivery date. After 2 business days the claim becomes an Exposure; and
- (d) claims resulting from the purchase and sale of Securities during settlement where both the Authorised Firm and the Counterparty are up to five business days overdue in settling. The five business days include the due payment or due delivery date. After five business days, the claim becomes an Exposure.

**4.5.6** An Authorised Firm must:

- (a) identify its Exposures;
- (b) identify its Counterparties, including whether any are Closely Related to each other or Connected to the Authorised Firm;
- (c) measure the size of its Exposures;
- (d) identify whether it has Exposures which are subject to the requirements of this section by:
  - (i) establishing the value of its Exposures;
  - (ii) reducing the value of its Exposures, at its discretion, by any one or more of the following:
    - (A) the amount of any specific provision made, where the provision relates to the risk of a credit loss occurring on that Exposure and is not held as part of a general provision or reserve against its Credit Risks;
    - (B) netting its claims on and liabilities to a Counterparty provided that the conditions in section 4.7 are met;
    - (C) the amount of Collateral held against its Exposures, where that Collateral is of a type listed in section 4.6 and provided that the enforceability requirements in that section are met;
    - (D) the value of a Credit Derivative, where the Credit Derivative is an instrument included in section 4.9 and the transaction meets the conditions set out in that section; and
    - (E) the effects of transactions transferring Credit Risks from the Authorised Firm to another party through Securitisation, provided that the conditions in section 4.8 are met; and
  - (iii) determining the size of its Exposures as a proportion of its Capital Resources;
- (e) identify which, if any, of its Exposures are fully or partially exempt (as defined in section A4.8) from the limits set out above because they are:
  - (i) fully or partially exempt Exposures; or
  - (ii) subject to a Connected Counterparty exemption;



- (f) aggregate its Exposures to the same Counterparty or group of Closely Related Counterparties or group of Connected Counterparties;
- (g) monitor and control its Exposures on a daily basis within the risk concentration limits; and
- (h) notify the DFSA immediately of any breach of the limits and confirm it in writing.

### **Determining the size of an exposure relative to capital resources**

**4.5.7** An Authorised Firm need not include exempt Exposures when monitoring whether the aggregate of its Exposures to a particular Counterparty is within the 25% limits in Rule 4.5.2.

**4.5.8** An Authorised Firm may exclude an Exposure from the concentration risk limits set out in section 4.5 if:

- (a) the Authorised Firm's Parent:
  - (i) guarantees the Exposure to a Counterparty or to a group of Closely Related Counterparties which are not Connected to the Authorised Firm; or
  - (ii) is set to increase, on the basis of a legally binding agreement, the Authorised Firm's capital resources, promptly and on demand, by:
    - (A) an amount that is sufficient to reverse completely the effect of any loss the Authorised Firm may sustain in connection with that Exposure; or
    - (B) the amount required to ensure that the Authorised Firm complies with its Capital Requirement set out in chapter 2; and
- (b) the Authorised Firm has advised the DFSA in writing that this Rule applies to the Authorised Firm.

## **4.6 Collateral**

**4.6.1** The requirements set out in this section apply to an Authorised Firm in relation to both Trading Book and Non-Trading Book positions, and apply where an Authorised Firm receives Collateral.

**4.6.2** (1) To the extent that an Authorised Firm holds Acceptable Collateral that secures an Exposure, it may, subject to Rule 4.6.5, take that Acceptable Collateral into account for the purposes of calculating CRCOM, CPCOM and Exposure Limits provided that:

- (a) the requirements of this section are met; and
  - (b) the Acceptable Collateral is not issued by the Counterparty to the transaction, nor by an associate of that Counterparty.
- (2) Acceptable collateral for the purposes of this section is set out in Rule A4.8.32.
- (3) Where a Credit or Counterparty Risk Exposure is partially collateralised, only the portion to which Acceptable Collateral is applied will attract the lower risk weight when calculating Capital Requirements. Similarly, only the collateralised portion may be exempt from the Large Exposures limits.

#### **Guidance**

App4 contains a list of Acceptable Collateral for the purposes of calculating CRCOM and CPCOM together with the amount of the applicable CPW.

#### **4.6.3** An Authorised Firm must:

- (a) value the Collateral and set an appropriate margin over the Exposure to take account of fluctuations in the market value of the Collateral; and
- (b) monitor the validity and enforceability of Collateral arrangements.

#### **4.6.4** An Authorised Firm must calculate CRCOM and CPCOM as defined in sections 4.3 and 4.4, using the CPW of the Acceptable Collateral where equal to or lower than that of the underlying Counterparty Exposure.

#### **4.6.5** An Authorised Firm must not adopt the treatment in Rule 4.6.2 unless:

- (a) it has an unconditional right to apply the Collateral to discharge (or to use the proceeds of realising the Collateral to discharge) the liability of the Counterparty on the default, liquidation, bankruptcy or other similar circumstance of the Counterparty;
- (b) the Collateral arrangements are:
  - (i) legally well-founded in all relevant jurisdictions; and
  - (ii) enforceable in the default, liquidation, bankruptcy or other similar circumstance of the Counterparty or the Authorised Firm;
- (c) it has taken reasonable steps to satisfy itself that:
  - (i) the Counterparty providing the Collateral is entitled to give the Collateral; and
  - (ii) there are no third party claims over the Collateral that would prejudice the Authorised Firm's ability to apply or realise the

Collateral to repay the Counterparty's obligation should any of the events in (a) or (b) occur; and

- (d) It has a written and reasoned legal opinion which:
  - (i) was provided by an external source of legal advice of appropriate professional standing;
  - (ii) confirms that the requirements of (a) are met for all relevant jurisdictions; and
  - (iii) is kept under review to ensure that it remains correct and up to date in the event of changes to the relevant laws.

**4.6.6** An Authorised Firm wishing to collateralise Exposures arising from off- balance sheet items other than OTC derivative contracts must set the value of the Acceptable Collateral against the nominal principal amount of the Exposure before the relevant CCF is applied.

**4.6.7** An Authorised Firm may collateralise the Exposures arising under an OTC derivative contract as measured using CEA.

## **4.7 Netting**

**4.7.1** The requirements set out in this section apply to an Authorised Firm with respect to both Trading Book and Non-Trading Book transactions.

**4.7.2** An Authorised Firm must have systems and controls for measuring, monitoring and controlling the Netting of transactions.

### **Guidance**

An Authorised Firm's systems and controls would be expected to:

- a. monitor the validity and enforceability of the contractual Netting agreement in the light of the possible changes to the relevant laws;
- b. calculate its off- balance sheet Exposures on transactions falling under the Netting agreement using the methodology set out in sections 4.3 and 4.4, and A4.9;
- c. ensure that Exposures on Trading Book transactions subject to Netting agreements which are reporting on a net basis are calculated on a net marked-to-market basis;
- d. monitor the limits to the Counterparty in terms of net and gross Exposures; and
- e. monitor potential roll-off Exposures (where short dated Exposures are netted against longer dated ones).

**4.7.3** An Authorised Firm which nets its claims on and liabilities to a Counterparty for the purposes of calculating its CRCOM, CPCOM and Large Exposure requirements must not net on-balance sheet items against off-balance sheet items.

**On-balance sheet netting**

**4.7.4** An Authorised Firm must not net an on-balance sheet item against an offsetting on-balance sheet item unless:

- (a)
  - (i) both those items are owing between the Authorised Firm and the same Counterparty;
  - (ii) the Authorised Firm nets those items in a way that is consistent with its legal rights against the Counterparty;
  - (iii) a legal right of set-off exists;
  - (iv) agreement between the Authorised Firm and the Counterparty does not contain a Walkaway Clause;
  - (v) the Netting provided for in the agreement between the Authorised Firm and the Counterparty is effective and enforceable in the default, bankruptcy, liquidation or other similar circumstances affecting either the Counterparty or the Authorised Firm;
  - (vi) the items are controlled and managed on a net basis;
  - (vii) the potential for roll-off Exposure is monitored and controlled where there is a Maturity Mismatch; and
  - (viii) debit and credit balances are denominated in the same currency or are in different currencies that are freely convertible; and
- (b) it has, in respect of each relevant jurisdiction, a written and reasoned legal opinion which:
  - (i) has been provided by an external source of legal advice of appropriate professional standing;
  - (ii) confirms that the requirements of (a)(i), (ii), (iii), (iv) and (v) are met for all relevant jurisdictions; and
  - (iii) is kept under review to ensure that it remains correct and up to date in the event of changes to the relevant laws.

**Off-balance sheet netting**

- 4.7.5** (1) An Authorised Firm must not net an off- balance sheet item against an offsetting off- balance sheet item, unless:
- (a) both those items are owing between the Authorised Firm and the same Counterparty;
  - (b) those items have been Netted By Novation or the Authorised Firm has a right to exercise Close Out Netting over them;
  - (c) that Netting creates the single net sum referred to in the definition of Netting by Novation or Close Out Netting;
  - (d) the Authorised Firm nets those items in a way that is consistent with its legal rights against the Counterparty;
  - (e) the Authorised Firm has a contractual Netting agreement with the Counterparty that covers those items and gives the Authorised Firm the rights referred to above;
  - (f) the contractual Netting agreement between the Authorised Firm and the Counterparty does not contain a Walkaway Clause;
  - (g) the Netting provided for in the contractual Netting agreement between the Authorised Firm and the Counterparty is effective and enforceable in the default, bankruptcy, liquidation or other similar circumstances affecting either the Counterparty or the Authorised Firm; and
  - (h) it has, in respect of each relevant jurisdiction, a written and reasoned legal opinion which:
    - (i) has been provided by an external source of legal advice of appropriate professional standing;
    - (ii) confirms that the requirements in (1)(a) - (g) are met; and
    - (iii) is kept under review to ensure that it remains correct and up to date in the event of changes to the relevant laws; and in the case of multi-jurisdictional transactions, the Authorised Firm must obtain for each relevant jurisdiction an appropriate legal opinion that complies with the requirements in this section.
- (2) In the event that (1)(g) cannot be demonstrated as a result of the inclusion of jurisdictions that do not permit effective and enforceable netting agreements, the validity of the netting agreement for the purposes of Rule 4.7.5 will not be impaired insofar as it relates to jurisdictions that do permit effective and enforced netting.

**Guidance**

1. An Authorised Firm should assess whether any qualifications, assumptions or reservations contained in the legal opinion cast doubt upon the enforceability of the Netting agreement. If, as a result of the qualifications, assumptions or reservations, there is material doubt about the enforceability of the agreement, the Authorised Firm should assume that the requirements for Netting have not been met.
2. An Authorised Firm using a standard form Netting agreement and a supporting legal opinion should ensure that the relevant requirements in section 4.7 are met. A standard form Netting agreement is a form of agreement which is prepared by a reputable, internationally recognised industry association and is supported by its own legal opinion. Where additional clauses are added to a standard form Netting agreement, the Authorised Firm should satisfy itself that the amended Netting agreement continues to meet the legal and contractual requirements in section 4.7. For instance, in such cases, an Authorised Firm may wish to obtain a second legal opinion to confirm that the relevant requirements in section 4.7 are still satisfied.
3. App4 sets out the calculation of the Potential Future Credit Exposure (PFCE) arising from OTC derivative contracts, on a net basis.

**4.8 Securitisation**

**4.8.1** This section and section A4.10 apply to an Authorised Firm which:

- (a) acts as an Originator in a Securitisation;
- (b) transfers Credit Risk on a single item or on a pool of items by any of the legal transfer methods set out in Rule 4.8.3(a);
- (c) acts as a Sponsor in a Securitisation; or
- (d) provides Credit Enhancement, Liquidity support, or underwriting or dealing facilities relating to the items being transferred.

**Guidance**

Further detailed Rules and Guidance are set out in section A4.10 which cover the specific circumstances of undrawn down commitments to lend, transfers of financed equipment and consumer goods, Revolving Securitisations, transfers to special purpose vehicles, repurchasing, Credit Enhancement, Liquidity support, and underwriting and dealing.

**4.8.2** An Authorised Firm must have risk management systems to identify, manage, monitor and, where applicable, control:

- (a) the liquidity and capital implications that may arise from the items returning to the balance sheet; and
- (b) the operational risks that may arise under a Securitisation.

**Guidance**

By way of example, Rule 4.8.2(a) may require an Authorised Firm to have in place committed facilities that could be drawn down to the extent necessary to fund items returning to the balance sheet.

**4.8.3** An Authorised Firm which is an Originator or a Sponsor must include every item that has been transferred by Securitisation in the calculation of its Capital Requirement unless:

- (a) the legal transfer has been effected by:
  - (i) novation;
  - (ii) legal or equitable assignment;
  - (iii) sub-participation; or
  - (iv) declaration of trust;
- (b) the legal transfer does not infringe the rights of any person;
- (c) the economic interests or risks associated with the item are effectively transferred for the whole of the life of that item such that the Authorised Firm does not have any interest, economic or otherwise, in, or Exposure to, the item; and
- (d) the Authorised Firm has, at the outset of the scheme, provided the DFSA with:
  - (i) a statement which sets out the assets which are to be the subject of securitisation and the accounting treatment to be adopted;
  - (ii) a written opinion from an external accountant in good standing which confirms that the accounting treatment is in accordance with the relevant accounting standard and PIB;
  - (iii) a written legal opinion from external legal advisers of appropriate professional standing confirming that the requirements of this Rule, which a legal adviser is able to address, have been met; and
  - (iv) where the assets relate to the Islamic Financial Business of an Authorised Firm, a written confirmation from the appointed Shari'a Supervisory Board that the securitisation complies with Shari'a;

the DFSA has not, within a period of thirty days from the date of receipt of the material, objected to the proposed scheme.

**Guidance**

The transfer of economic interests includes the transfer of substantially all of the risks and rewards of ownership including any right or obligation to repurchase or reacquire the asset. An Authorised Firm may however retain certain links with the transferred assets, which should be limited to existing contractual obligations or service of the items, or both.

**4.8.4** For the purposes of Rule 4.8.3(a), the economic interests or risks associated with the items are effectively transferred if:

- (a) the Authorised Firm notifies the buyer of the items, investors in a scheme, or other parties having an economic interest, that it is not legally required, and recognises no other obligation, to repurchase the items or support any losses sustained by the buyer, investors or other party; and
- (b) the terms of the transfer:
  - (i) ensure that the Authorised Firm has no residual economic interest in the principal amount of the item (or the part transferred) and the buyer has no formal recourse to the seller for losses;
  - (ii) state that the buyer and not the Authorised Firm will be subject to any rescheduled or renegotiated terms;
  - (iii) ensure that, where payments from the debtor are to be made through the Authorised Firm, the Authorised Firm is under no obligation to remit funds until they are received from the debtor; and
  - (iv) do not confer any right or obligation upon the seller to repurchase the items transferred except where the obligation arises from a warranty given by the Authorised Firm in respect of the items at the time of transfer, provided the warranty is not:
    - (A) in respect of the future creditworthiness of the debtors; or
    - (B) in respect of matters outside the control of the Authorised Firm.

**Guidance**

Payments made by the Authorised Firm before and in anticipation of receipt of funds represent liquidity support. In such cases, the payment should be immediately recoverable if the funds are not received when due.



## **4.9 Credit derivatives**

### **Guidance**

This section, which sets out the Trading and Non-Trading Book requirements for Credit Derivatives, should be read in conjunction with section A4.11. In that section, Rules A4.11.2 to A4.11.20 set out Rules in respect of the treatment of Credit Derivatives in the Trading Book and Rules A4.11.21 to A4.11.45 set out Rules in respect of the treatment of Credit Derivatives in the Non-Trading Book.

**4.9.1** An Authorised Firm which uses Credit Derivatives must comply with the Rules set out in section A4.11.

**4.9.2** An Authorised Firm which uses Credit Derivatives must have systems and controls to manage the associated risks.

### **Guidance**

1. Systems and controls requirements relating to Credit Risk are set out in section 4.2. In respect of Credit Derivatives, an Authorised Firm should, in particular, maintain:
  - a. appropriate information systems to make senior management aware of the risks being undertaken. This might include information on the level of activity in each of the different products; the ability of the Authorised Firm (if it is the protection seller) to pursue the underlying borrower when a Credit Event Payment has been triggered; and contractual characteristics of the products (such as tailoring of standard documentation for particular transactions);
  - b. adequate procedures for ensuring that the Credit Risk of a Reference Asset acquired through a Credit Derivative transaction and any Counterparty Risk arising from unfunded Credit Derivatives are captured within the Authorised Firm's normal credit approval and monitoring regime. An Authorised Firm should be able to assess the initial Credit Risk involved in undertaking the transaction and also to monitor the Credit Risk on a continuing basis. Information asymmetry (between the buyer and seller of Credit Risk) may be a significant issue if there is no widely traded asset of the reference name;
  - c. systems to assess and take account of the possibility of default correlation between the Reference Asset and the Protection Seller; and
  - d. valuation procedures (including assessment and monitoring of the Liquidity of the Credit Derivative and the Reference Asset) and procedures to determine an appropriate Liquidity reserve to be held against uncertainty in valuation; this is particularly important for Credit Derivatives where the Reference Asset is illiquid (for example, a loan), or if the derivative has multiple reference obligors.
2. An Authorised Firm should consider:
  - a. how to identify, assess, mitigate, control and monitor any legal and reputational risk associated with Credit Derivatives;
  - b. whether Credit Derivatives are subject to regulation as insurance business in any of the relevant jurisdictions;

- c. whether conflicts of interest might arise within the institution in respect of privileged information if there is no widely traded asset of the reference obligor;
  - d. whether the transfer of Credit Risk through a Credit Derivative contravenes any terms and conditions relating to the Reference Asset, and where necessary that all consents have been obtained; and
  - e. where Credit Risk to many obligors has been transferred as a package, whether the reputation of the Authorised Firm might be damaged by subsequent deterioration in the quality of these assets.
3. Where an Authorised Firm has transferred significant Credit Risk using funded Credit Derivatives, it should be able to re-finance the Exposures that have been transferred. For example, where the Authorised Firm has bought protection of shorter maturity than the assets being protected, it should consider how it would obtain funding if a replacement contract were not to be found on maturity of the protection.
4. Where an Authorised Firm has hedged significant Credit Risk using unfunded Credit Derivatives of shorter maturity than the underlying Exposures, it should consider whether it would have sufficient Capital Resources to support the risk in the event of a replacement contract being unavailable immediately on maturity of the Credit Risk protection, or how such roll-over risk could otherwise be avoided or limited.

## **4.10 Application of credit risk methodology to Islamic Contracts**

- 4.10.1** For any Islamic contracts that are funded by an Authorised Firm (including its own investments via any PSIA) the Authorised Firm must calculate a CRCOM on the basis set out in IFR Rules 5.4.4, 5.4.5, 5.4.6 and 5.4.7 as if the contracts were PSIA funded assets except that the 35% weighting must be replaced by a 100% weighting.
- 4.10.2** In addition to the issues specified in section 4.5, the Authorised Firm's policy must set out how provisions relating to assets financed by its own funds are segregated from those financed by PSIA holders.

## **5 MARKET RISK**

### **5.1 Application**

- 5.1.1** (1) Sections 5.2 to 5.9 of this chapter apply to an Authorised Firm in Category 1 or 2.
- (2) Section 5.6 of this chapter applies to an Authorised Firm in Category 3.
- (3) Sections 5.2, 5.3 and 5.5 to 5.9 apply to an Authorised Firm in Category 5.

#### **Guidance**

1. Rule 2.3.4 provides that the Market Risk Capital Requirement of an Authorised Firm is calculated as the sum of:
  - a. the Interest Rate Risk Capital Requirement (section 5.4);
  - b. the Equity Risk Capital Requirement (section 5.5);
  - c. the Foreign Exchange Risk Capital Requirement (section 5.6.);
  - d. the Commodities Risk Capital Requirement (section 5.7);
  - e. the Options Risk Capital Requirement (section 5.8); and
  - f. the Securities Underwriting Capital Requirement (section 5.9).
2. This chapter sets out the manner in which each of those Capital Requirements must be calculated, monitored and controlled by an Authorised Firm.
3. In addition to complying with the applicable Rules in chapter 5, an Authorised Firm investing in or holding Islamic Contracts whether or not for the purpose of a PSIA will need to take account of the provisions under IFR Rules 5.4.8 to 5.4.14 to calculate the Market Risk for those Islamic Contracts.

### **5.2 Market risk systems and controls**

- 5.2.1** (1) An Authorised Firm must implement and maintain a Market Risk policy which enables it to identify, assess, control and monitor Market Risk.
- (2) The policy must be documented and include the Authorised Firm's risk appetite and how it identifies, assesses, mitigates, controls and monitors that risk.

- (3) An Authorised Firm must:
  - (a) ensure that its risk management systems enable it to implement the Market Risk policy;
  - (b) identify, assess, mitigate, control and monitor its Market Risk.
- (4) An Authorised Firm must, at intervals that are appropriate to the nature, scale and complexity of its activities, review and update the policy.

**Guidance**

Guidance in respect of what an Authorised Firm's Market Risk policy should include is provided in section A5.1.

**5.3 Use of internal market risk models**

**5.3.1** An Authorised Firm in Category 1, 2 or 5 may use an internal model to calculate its Market Risk Capital Requirement or any components of its Market Risk Capital Requirement if its internal model and its use have been approved in writing by the DFSA.

**5.3.2** If the DFSA approves an internal model or an internal model's use, it may:

- (a) impose, withdraw or amend at any time conditions in respect of the use of the internal model; and
- (b) withdraw approval if it forms the view that the internal model or its use is no longer suitable for the calculation of the Authorised Firm's Market Risk Capital Requirement or any component of it.

**5.3.3** An Authorised Firm which uses an internal model in accordance with Rule 5.3.1 must have in place a rigorous and comprehensive stress-testing programme which meets the criteria set out in Rule A5.8.1.

**5.3.4** An Authorised Firm that has received approval for the use of an internal model may only revert to calculating its Market Risk Capital Requirement or any component of it in accordance with App5 with the prior written consent of the DFSA.

**Guidance**

1. This section sets out the conditions under which an Authorised Firm is permitted to use an internal model to calculate its Market Risk Capital Requirement or any component of its Market Risk Capital Requirement. An Authorised Firm that wishes to use an internal model to calculate any part of this requirement is required to apply to the DFSA. Internal models will commonly permit more extensive netting of long and short positions and have greater risk sensitivity.

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2. In assessing whether to give approval, the DFSA will consider an Authorised Firm's risk management standards; the quantitative model standards; the stress-testing and back-testing standards and the process surrounding the calculation of the appropriate regulatory Capital Requirement.
3. The DFSA will usually only give its approval for the use of an internal risk model if:
  - a. the use of the model to calculate the Market Risk capital requirement has been approved by another appropriate regulator or the DFSA is satisfied having been provided by the Authorised Firm with such opinions from independent experts as it may require, that the model adequately addresses Market Risk requirements;
  - b. use of the methodology is integrated into the governance and control framework of the Authorised Firm. Specifically, the Governing Body and senior management of the Authorised Firm receives and reviews appropriate reports in respect of the entity;
  - c. it is satisfied that the Authorised Firm's risk management system is conceptually sound and is implemented with integrity;
  - d. the Authorised Firm has sufficient numbers of staff skilled in the use of sophisticated models not only in the trading area but also in the risk control, audit, and if necessary, back office areas;
  - e. the Authorised Firm's models have a proven track record of reasonable accuracy in measuring risk; and
  - f. the Authorised Firm regularly conducts stress tests.
4. In determining whether an internal value at risk model meets the standard for approval, the DFSA will apply the criteria set out in section A5.8, which are based on the Basel Market Risk Capital Amendment 1996 and which can be grouped under the following headings:
  - a. qualitative standards;
  - b. specification of Market Risk factors;
  - c. quantitative standards;
  - d. stress testing; and
  - e. combination of internally developed models and the Standardised Methodology.
5. In addition to value-at-risk models, the DFSA recognises option risk aggregation models and interest rate 'pre-processing' or sensitivity models, as set out under the EU's Capital Adequacy Directive (these are the so-called 'CAD1 models').
6. Option risk aggregation models analyse and aggregate options risks for interest rate, equity, foreign exchange and commodity options.
7. Interest rate pre-processing models are used to calculate weighted positions for inclusion in an Authorised Firm's interest rate Market Risk Capital Requirement calculation under the Duration Method.

## 5.4 Interest rate risk capital requirement

**5.4.1** This section applies to an Authorised Firm in Category 1 or 2 in respect of Trading Book Transactions.

### Guidance

This section sets out how Authorised Firms with Trading Book positions in interest rate instruments must calculate an Interest Rate Risk Capital Requirement.

### Calculation of the interest rate risk capital requirement

**5.4.2** An Authorised Firm must calculate its Interest Rate Risk Capital Requirement:

- (a) by applying its internally developed Market Risk model which has been approved by the DFSA for this purpose; or
- (b) by applying the Rules set out in section A5.2.

## 5.5 Equity risk capital requirement

**5.5.1** This section applies to an Authorised Firm in Category 1, 2, or 5, which has a Trading Book.

### Guidance

This section sets out how Authorised Firms must calculate an Equity Risk Capital Requirement, and which equity and equity-like positions are included in the capital requirement calculation.

### Calculation of the equity risk capital requirement

**5.5.2** An Authorised Firm must calculate its Equity Risk Capital Requirement:

- (a) by applying its internally developed Market Risk Model which has been approved by the DFSA for this purpose; or
- (b) by applying the Rules set out in section A5.3.

## 5.6 Foreign exchange risk capital requirement

**5.6.1** This section applies to an Authorised Firm in Category 1, 2, 3, or 5 in respect of Trading Book and Non-Trading Book foreign exchange positions.

### Guidance

This section sets out the manner of calculating the Foreign Exchange Risk Capital Requirement to cover the risk of holding or taking positions in Foreign Currencies and gold.

### Calculation of the foreign exchange risk capital requirement

- 5.6.2** An Authorised Firm must, subject to Rule 5.6.3, calculate its Foreign Exchange Risk Capital Requirement by:
- (a) applying its internally developed Market Risk model which has been approved by the DFSA for this purpose; or
  - (b) by applying the Rules in section A5.4.
- 5.6.3** An Authorised Firm need not calculate a Foreign Exchange Risk Capital Requirement if:
- (a) its Foreign Currency business, defined as the greater of the sum of its gross long positions and the sum of its gross short positions in all Foreign Currencies, does not exceed 100% of Capital Resources as defined in chapter 2; and
  - (b) its overall net open position as defined in Rule A5.4.4 does not exceed 2% of its Capital Resources as defined in chapter 2.

## 5.7 Commodities risk capital requirement

- 5.7.1** This section applies to an Authorised Firm in Category 1, 2 or 5 in respect of Trading Book and Non-Trading Book commodity positions.

### Guidance

This section establishes a minimum capital standard to cover the risk of holding or taking positions in commodities, including precious metals, but excluding gold (which is covered in Section 5.6).

### Calculation of commodities risk capital requirement

- 5.7.2** An Authorised Firm must calculate its Commodities Risk Capital Requirement by:
- (a) applying its internally developed Market Risk model which has been approved by the DFSA for this purpose; or
  - (b) applying the Rules set out in section A5.5.

## 5.8 Option risk capital requirement

- 5.8.1** This section applies to an Authorised Firm in Category 1, 2 or 5 that has a Trading Book.

### Calculation of option risk capital requirement

- 5.8.2** (1) An Authorised Firm must calculate an Option Risk Capital Requirement if it has positions in options in its Trading Book.
- (2) An Authorised Firm must calculate its Option Risk Capital Requirement by:
- (a) applying its internally developed Market Risk model which has been approved by the DFSA for this purpose; or
  - (b) by applying the Rules set out in section A5.6.

### 5.9 Securities underwriting capital requirement

- 5.9.1** This section applies to an Authorised Firm in Category 1, 2 or 5 in respect of Trading Book Securities Underwriting positions.

#### Guidance

1. This section sets out a framework for calculating the amount of Capital Requirement when an Authorised Firm has commitments to underwrite an issue of Securities, and the associated risk management standards which an Authorised Firm Underwriting Securities must meet.
2. Underwriting is defined in the Glossary as an arrangement under which a party agrees to buy, before issue, a specified quantity of Securities in an issue of Securities on a given date and at a given price, if no other party has purchased or acquired them.

- 5.9.2** An Authorised Firm must establish and maintain such systems and controls to monitor and manage its Underwriting and sub-underwriting business as are appropriate to the nature, scale and complexity of its Underwriting and sub-underwriting business.

#### Guidance

1. An Authorised Firm should take reasonable steps to:
  - a. allocate responsibility for the management of its Underwriting and sub-underwriting business;
  - b. allocate adequate resources of the Authorised Firm to monitor and control its Underwriting and sub-underwriting business;
  - c. satisfy itself that its systems to monitor its Exposure to a Counterparty will calculate, revise and update its Underwriting Exposure to each Counterparty and its Capital Requirements;



- d. satisfy itself of the suitability of each person who performs functions for it in connection with the Authorised Firm's Underwriting business, having regard to the person's skill and experience; and
- e. satisfy itself that its procedures and controls to monitor and manage its Underwriting business address the capacity of sub-underwriters to meet sub-Underwriting commitments.

**5.9.3** (1) An Authorised Firm must calculate a Securities Underwriting Capital Requirement if it has a commitment to underwrite or sub-underwrite an issue of Securities.

(2) An Authorised Firm has a commitment to underwrite or sub-underwrite an issue of Securities where:

- (a) it gives a commitment to an Issuer of Securities to underwrite an issue of Securities;
- (b) it gives a commitment to sub-underwrite an issue of Securities; or
- (c) it is a member of a syndicate or group that gives a commitment to an Issuer to underwrite an issue of Securities or a commitment to sub-underwrite an issue of Securities.

**5.9.4** An Authorised Firm must regard a commitment to underwrite an issue of Securities, subject to any right set out in Rule 5.9.6, as the initial commitment to underwrite from the earlier of:

- (a) the time the Authorised Firm signs an agreement with the Issuer of Securities to underwrite those Securities; or
- (b) the time the price and allocation of the issue are set.

**5.9.5** Where the issue price has not been fixed, an Authorised Firm must use the highest estimate of the price and its allocation for the purpose of calculating its initial gross commitment.

**5.9.6** If an Authorised Firm has at its discretion an irrevocable right to withdraw from an Underwriting commitment, exercisable within a certain period, the commitment commences when that right expires.

**5.9.7** An Authorised Firm must calculate its Securities Underwriting Capital Requirement by:

- (a) applying its internally developed Market Risk model which has been approved by the DFSA for this purpose; or
- (b) by applying the Rules in section A5.7.

## **6 LIQUIDITY RISK**

### **6.1 Application**

- 6.1.1** (1) This chapter applies to an Authorised Firm in Category 1 or 5.
- (2) Rule 6.2.2(3) applies to an Authorised Firm in Category 2.

#### **Guidance**

In accordance with Rule 1.2.1, an Authorised Firm is required to ensure that there is no significant risk that liabilities cannot be met as they fall due. With specific reference to liquidity, an Authorised Firm may meet its obligations in a number of ways, including:

- a. by holding sufficient immediately available cash or readily marketable assets;
- b. by securing an appropriate matching future profile of cashflows; and
- c. by further borrowing.

### **6.2 Liquidity systems and controls**

- 6.2.1** (1) An Authorised Firm must establish and maintain a Liquidity Risk policy.
- (2) The policy must be documented and include the strategy for the daily and long-term management of Liquidity Risk appropriate to the nature, scale and complexity of the activities conducted.
- (3) The strategy must include a system for identifying and assessing Liquidity Risk in accordance with Rule 6.2.4.
- (4) The strategy must include a process for the measurement and monitoring of Liquidity Risk using a robust and consistent method which enables the Authorised Firm to implement the requirements set out in Rule 6.2.5.
- (5) The strategy must include a system for controlling Liquidity Risk which enables the Authorised Firm to implement the requirements set out in Rule 6.2.6.
- (6) An Authorised Firm must ensure that it has risk management systems to implement the policy.

**Guidance**

1. The DFSA expects that an Authorised Firm's Liquidity Risk strategy will set out the approach that the Authorised Firm will take to Liquidity Risk management, including various quantitative and qualitative targets. It should be communicated to all relevant functions and staff within the organisation and be set out in the Authorised Firm's Liquidity Risk policy.
2. The DFSA expects that an Authorised Firm's strategy for managing Liquidity Risk will specify:
  - a. the basis for managing liquidity, for example, regional or central;
  - b. the degree of asset concentration potentially affecting Liquidity Risk that is acceptable to the Authorised Firm;
  - c. ways of managing both the Authorised Firm's aggregate Foreign Currency liquidity needs and its needs in each individual currency;
  - d. ways of managing market access;
  - e. where appropriate, the use of derivatives to minimise Liquidity Risk;
  - f. where appropriate, the management of intra-day liquidity; and
  - g. where appropriate, the management of liquidity issues associated with PSIA and Islamic Contracts.

- 6.2.2** (1) An Authorised Firm must ensure that its Governing Body is responsible for monitoring the nature and level of Liquidity Risk assumed by the Authorised Firm and the process used to manage that risk.
- (2) Without limiting the operation of (1) the responsibilities of an Authorised Firm's Governing Body in respect of Liquidity Risk include:
- (a) approving the Authorised Firm's Liquidity Risk strategy;
  - (b) establishing and maintaining a senior management structure for the management of Liquidity Risk and for ensuring compliance with the Authorised Firm's Risk strategy;
  - (c) monitoring the Authorised Firm's overall Liquidity Risk profile on a regular basis and being aware of any material changes in the Authorised Firm's current or prospective Liquidity Risk profile; and
  - (d) ensuring that Liquidity Risk is adequately identified, assessed, mitigated, controlled and monitored.
- (3) An Authorised Firm in Category 2 must:
- (a) establish and maintain a senior management structure to manage Liquidity Risk;

- (b) identify, assess, mitigate, control and monitor Liquidity Risk; and
- (c) monitor the Authorised Firm's overall Liquidity Risk profile on a regular basis.

**Guidance**

In respect of Rule 6.2.2(2)(b), senior management are expected to:

- a. oversee the development, establishment and maintenance of procedures and practices that translate the goals, objectives and risk tolerances approved by the Governing Body into operating standards that are consistent with the Governing Body's intent and which are understood by the relevant members of an Authorised Firm's staff;
- b. adhere to the lines of authority and responsibility that the Governing Body has established for managing Liquidity Risk;
- c. oversee the establishment and maintenance of management information and other systems that identify, assess, control and monitor the Authorised Firm's Liquidity Risk; and
- d. oversee the establishment of effective internal controls over the Liquidity Risk management process.

- 6.2.3** (1) An Authorised Firm may delegate the day-to-day management of its Liquidity Risk to another entity in the same Group for management on a Group basis only if:
- (a) the Governing Body of the Authorised Firm:
    - (i) has formally approved the delegation; and
    - (ii) keeps the delegation under review; and
  - (b) the Authorised Firm notifies the DFSA in writing of the delegation immediately upon it being made.
- (2) If an Authorised Firm delegates the management of its Liquidity Risk in accordance with (1), the requirements in this Chapter continue to apply to the Authorised Firm.

**Guidance**

If Liquidity Risk management is delegated as set out in Rule 6.2.3, responsibility for its effectiveness remains with the Authorised Firm's Governing Body.

**Identifying liquidity risk**

- 6.2.4** (1) An Authorised Firm must assess the repayment profiles of its assets under both normal market conditions and stressed conditions resulting from either general market turbulence or firm-specific difficulties.

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- (2) An Authorised Firm must assess the extent to which committed facilities can be relied upon under stressed conditions identified in accordance with Rule 6.2.9.
- (3) An Authorised Firm must consider potential liability concentrations when determining the appropriate mix of liabilities.
- (4) An Authorised Firm must consider how its off-balance sheet activities affect its cash flows and Liquidity Risk profile under both normal and stressed conditions.
- (5) If an Authorised Firm has significant, unhedged liquidity mismatches in particular currencies, it must assess:
  - (a) the volatilities of the exchange rates of the mismatched currencies;
  - (b) likely access to the foreign exchange markets in normal and stressed conditions; and
  - (c) the stability of deposits in those currencies with the Authorised Firm in stressed conditions.

**Guidance**

1. As part of the assessment for the purposes of Rule 6.2.4(1), an Authorised Firm should identify significant concentrations within its asset portfolio.
2. For the purposes of Rule 6.2.4(3), an Authorised Firm should consider factors including:
  - a. the term structure of its liabilities;
  - b. the credit-sensitivity of its liabilities;
  - c. the mix of secured and unsecured funding;
  - d. concentrations among its liability providers or related groups of liability providers;
  - e. reliance on particular instruments or products;
  - f. the geographical location of liability providers; and
  - g. reliance on intra-Group funding.
3. As appropriate, an Authorised Firm would be expected to consider the amount of funding required by:
  - a. commitments given;
  - b. standby facilities given;
  - c. wholesale overdraft facilities given;

- d. proprietary derivatives positions; and
- e. liquidity facilities given for Securitisation transactions.

### **Measuring and monitoring liquidity risk**

- 6.2.5** (1) An Authorised Firm must ensure that the method referred to in Rule 6.2.1(4) for measuring Liquidity Risk is capable of:
- (a) measuring the extent of the Liquidity Risk it is incurring;
  - (b) dealing with the dynamic aspects of the Authorised Firm's liquidity profile;
  - (c) where appropriate, measuring the Authorised Firm's Exposure to Foreign Currency Liquidity Risk;
  - (d) where appropriate, measuring the Authorised Firm's intra-day liquidity positions; and
  - (e) where appropriate, measuring the Authorised Firm's Exposure to PSIA and Islamic Contract Liquidity Risk.
- (2) An Authorised Firm must establish and maintain a system of management reporting which provides relevant, accurate, comprehensive, timely and reliable Liquidity Risk reports to relevant functions within the Authorised Firm.

### **Guidance**

1. Management information should include the following:
  - a. a cash-flow or funding gap report;
  - b. a funding maturity schedule;
  - c. a list of large providers of funding;
  - d. where appropriate, a schedule of Islamic funding sources;
  - e. a limit monitoring and exception report;
  - f. asset quality and trends;
  - g. earnings projections; and
  - h. the Authorised Firm's reputation in the market and the condition of the market itself.
2. Where an Authorised Firm is a member of a Group, it should be able to assess the potential impact on it of Liquidity Risk arising in other parts of the Group.

**Controlling liquidity risk**

- 6.2.6** An Authorised Firm must ensure that the system referred to in Rule 6.2.1(5):
- (a) enables the Authorised Firm's Governing Body and senior management to review compliance with limits set in accordance with Rule 6.2.7 and operating procedures; and
  - (b) has appropriate approval processes, limits and other mechanisms designed to provide reasonable assurance that the Authorised Firm's Liquidity Risk management processes are adhered to.
- 6.2.7** (1) An Authorised Firm's Governing Body must set appropriate liquidity limits covering Liquidity Risk management in both day-to-day and stressed conditions.
- (2) An Authorised Firm must periodically review and, where appropriate, adjust the limits referred to in (1) when its Liquidity Risk policy changes.
- (3) An Authorised firm must promptly resolve any policy or limit exceptions according to the processes described in its Liquidity Risk policy.
- 6.2.8** An Authorised Firm must assess market access under a variety of normal and stressed conditions.
- 6.2.9** (1) An Authorised Firm must use stress and scenario testing to assess the Liquidity Risk it would face in different circumstances.
- (2) When using stress and scenario testing in accordance with (1), an Authorised Firm must:
- (a) use scenarios based on varying degrees of stress and both Authorised Firm-specific and market-wide difficulties; and
  - (b) include a cash-flow projection for each scenario tested, based on reasonable estimates of the impact (both on and off-balance sheet) of that scenario on the Authorised Firm's funding needs and sources.
- (3) An Authorised Firm must frequently review the assumptions used in stress testing scenarios to ensure they remain appropriate.

**Guidance**

1. The identification of the possible balance sheet and off-balance sheet impact referred to in Rule 6.2.9(2)(b) should take into account:
  - a. possible changes in the market's perception of the Authorised Firm and the effects that this might have on the Authorised Firm's access to the markets, including:

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- i. where the Authorised Firm funds its holdings of assets in one currency with liabilities in another, access to foreign exchange markets, particularly in less frequently traded currencies;
- i. access to secured funding, including by way of repurchase agreement transactions; and
- ii. the extent to which the Authorised Firm may rely on committed facilities made available to it;
- b. whenever applicable the possible effect of each scenario tested on currencies whose exchange rates are currently pegged or fixed; and
- c. that:
  - i. general market turbulence may trigger a substantial increase in the extent to which persons exercise rights against the Authorised Firm under off-balance sheet instruments to which the Authorised Firm is party;
  - ii. access to OTC derivative and foreign exchange markets is sensitive to credit-ratings;
  - iii. early amortisation in asset Securitisation transactions with which the Authorised Firm has a connection may be triggered; and
  - iv. its ability to securitise assets may be reduced.

**6.2.10 (1)** An Authorised Firm must have a documented contingency funding plan to ensure that, for each of the tested scenarios, the Authorised Firm has sufficient liquid financial resources to meet its liabilities as they fall due.

(2) The contingency funding plan referred to in (1) must:

- (a) list the events or circumstances that will lead the Authorised Firm to put any part of the plan into action;
- (b) set out the extent to which the plan relies upon:
  - (i) asset sales, using assets as collateral on secured funding (including repurchase agreements), securitising its assets or otherwise reducing its assets;
  - (ii) modifying the structure of, or increasing, its liabilities; and
  - (iii) the use of committed facilities; and
- (c) contain administrative policies and procedures that will enable the Authorised Firm to manage the implementation of the plan including:
  - (i) the responsibilities of senior management;



- (ii) the names, location and contact details of members of the team responsible for implementing the plan;
- (iii) the details of who is responsible for contact with the Authorised Firm's head office (if appropriate), analysts, investors, external auditors, media, significant customers, regulators and others; and
- (iv) the mechanisms that enable senior management and the Governing Body to receive relevant, accurate, comprehensive, timely and reliable management information.

### **6.3 Liquidity requirements**

**6.3.1** This section applies to an Authorised Firm in Category 1 or 5.

#### **Global liquidity concession**

- 6.3.2** (1) An Authorised Firm which carries on business in the DIFC through a branch may apply to the DFSA for a global liquidity concession.
- (2) If the DFSA grants a global liquidity concession to an Authorised Firm, that Authorised Firm need not comply with the quantitative liquidity requirements of this section.

#### **Guidance**

Section A6.1 provides guidance in respect of the type of information upon which the DFSA will base its assessment of an application for a global liquidity concession.

#### **The maturity mismatch approach**

#### **Guidance**

The Maturity Mismatch approach measures an Authorised Firm's liquidity by assessing the mismatch between its inflows (assets) and outflows (liabilities) within different time bands on a Maturity Ladder.

- 6.3.3** (1) An Authorised Firm in Category 1 or 5 must use the Maturity Mismatch approach, as set out in this section, to measure liquidity.
- (2) When using the Maturity Mismatch approach, an Authorised Firm must determine the net cumulative Maturity Mismatch position for each time band by:
- (a) determining, in accordance with the Rules in sections A6.2 and A6.3, the inflows (assets) and outflows (liabilities) which are, subject to their falling within one of the time bands, to be included in the Maturity Ladder and at what maturities;

- (b) inserting each inflow (asset) and outflow (liability) into one or more of the following time bands on the Maturity Ladder:
  - (i) sight – 8 days; or
  - (ii) sight – 1 month; and
- (c) subtracting outflows (liabilities) from inflows (assets) in each time band.

**Measuring liquidity for category 1 and category 5**

- 6.3.4** (1) An Authorised Firm in Category 1 or 5 must determine a net cumulative Maturity Mismatch position for each time band in respect of each of the following means of funding used by the Authorised Firm:
- (a) Unrestricted PSIA's;
  - (b) Restricted PSIA's; and
  - (c) deposits.
- (2) An Authorised Firm in Category 1 or 5 must calculate its liquidity by using the net cumulative Maturity Mismatch position separately for each means of funding used by the Authorised Firm as a percentage of the means of funding in each time band as follows:
- (a) Unrestricted PSIA's net cumulative Maturity Mismatch % =
 
$$\frac{\text{Net cumulative Maturity Mismatch} \times 100}{\text{Total Unrestricted PSIA's}}$$
  - (b) Restricted PSIA's net cumulative Maturity Mismatch % =
 
$$\frac{\text{Net cumulative Maturity Mismatch} \times 100}{\text{Total Restricted PSIA's}}$$
  - (c) Total deposit liabilities net cumulative Maturity Mismatch % =
 
$$\frac{\text{Net cumulative Maturity Mismatch} \times 100}{\text{Total deposits}}$$
- (3) If an Authorised Firm exceeds one or both of the following net cumulative Maturity Mismatch limits in respect of any of the means of funding it must immediately inform the DFSA in writing and clearly explain what steps the Authorised Firm will take to bring its liquidity position back within the limits:
- (a) sight – 8 days, negative 15%; and
  - (b) sight – 1 month, negative 25%.

## **7 GROUP RISK**

### **7.1 Application**

- 7.1.1** (1) This chapter applies to an Authorised Firm in Category 1, 2, 3 or 5 which is a member of a Financial Group.
- (2) Section 7.2 applies to an Authorised Firm in Category 1, 2, 3 or 5 which is a member of a Group.

#### **Guidance**

Group membership may be a source of both strength and weakness to an Authorised Firm. The purpose of Group Risk requirements is to ensure that an Authorised Firm takes proper account of the risks related to the Authorised Firm's membership of a Group. The Group Risk requirements form a key part of the DFSA's overall approach to prudential supervision.

- 7.1.2** (1) If an Authorised Firm is a member of a Financial Group and the DFSA considers it necessary to extend the scope of the Financial Group to include entities otherwise outside of the Financial Group to ensure appropriate Financial Group supervision, an Authorised Firm must also include in the scope of the Financial Group any entity the DFSA may direct the Authorised Firm in writing to include.
- (2) An Authorised Firm may, for the purposes of this section, exclude from its Financial Group any entity the inclusion of which would be misleading or inappropriate for the purposes of Financial Group supervision, provided the Authorised Firm has obtained the DFSA's prior written approval.
- (3) An Authorised Firm must provide the DFSA, if requested, with information regarding other Group entities, the Group structure and the systems and controls in place to manage Group Risk.

#### **Guidance**

If more than one member of the same Group is subject to an obligation to provide information in respect of a position of the Group, one or more of those Authorised Firms may make application to the DFSA for an appropriate waiver or modification.

## **7.2 Systems and controls requirements**

**7.2.1** If an Authorised Firm is a member of a Group it must establish and maintain systems and controls for the purpose of:

- (a) monitoring the effect on the Authorised Firm of:
  - (i) its relationship with other members of its Group;
  - (ii) its membership in its Group; and
  - (iii) the activities of other members of its Group;
- (b) monitoring compliance with Financial Group supervision requirements below, including systems for the production of relevant data;
- (c) monitoring funding within the Group; and
- (d) monitoring compliance with Financial Group reporting requirements.

### **Guidance**

For the purposes of the above requirement, an Authorised Firm may take into account its position within its Group. For instance, it would be reasonable for a small Authorised Firm within a larger Group to place some reliance on its parent to ensure that appropriate systems and controls are in place.

## **7.3 Financial group capital requirements and financial group capital resources**

- 7.3.1** (1) Section 7.3 does not apply to an Authorised Firm if:
- (a) the Authorised Firm's Financial Group is already the subject of Financial Group prudential supervision by the DFSA as a result of the authorisation of another Financial Group member; or
  - (b) the DFSA has confirmed in writing, in response to an application from the Authorised Firm, that it is satisfied that the Authorised Firm's Group is the subject of consolidated prudential supervision by an appropriate regulator; or
  - (c) except where the DFSA has directed the inclusion of an entity pursuant to Rule 7.1.2, the percentage of total assets of Authorised Firms and Financial Institutions in the Financial Group is less than 40% of the total Financial Group assets.

- (2) If an Authorised Firm receives confirmation in writing from the DFSA in accordance with (1)(b), it must immediately advise the DFSA in writing if the circumstances upon which the confirmation was based change.

**7.3.2** An Authorised Firm must ensure at all times that its Financial Group Capital Resources, as calculated in Rule 7.3.4, are equal to or in excess of its Financial Group Capital Requirement as calculated in Rule 7.3.3.

**Guidance**

If an Authorised Firm breaches Rule 7.3.2, the DFSA will take into account the full circumstances of the case including any remedial steps taken by another regulator or the Authorised Firm, in determining what enforcement action, if any, it will take.

**Financial group capital requirement**

- 7.3.3** (1) An Authorised Firm must calculate its Financial Group Capital Requirement as the sum of the entity requirements calculated in accordance with (2) and (3);
- (2) Entity requirements for this purpose are:
- (a) an Authorised Firm's Capital Requirement calculated in accordance with the requirements of Chapter 2, or in the case of an Authorised Firm which is authorised to effect or carry out Contracts of Insurance, calculated in accordance with the requirements of the PIN module;
  - (b) in the case of regulated entities supervised by a regulator other than the DFSA, then, with the written agreement of the DFSA, the capital requirement of that entity; and
  - (c) for other entities in the Financial Group, a notional Capital Requirement calculated as directed by the DFSA.
- (3) Where an Authorised Firm's Financial Group includes an entity under (c) of the definition of Financial Group in the Glossary that Financial Institution's capital requirement is included on a proportionate basis.

**Financial group capital resources**

- 7.3.4** (1) An Authorised Firm must calculate its Financial Group Capital Resources by applying either of the following methods, excluding those amounts referred to in Rule 7.3.5:
- (a) the accounting consolidation method, which calculates the Capital Resources of the Financial Group based on the Financial Group's consolidated financial statements; or
  - (b) the aggregation method, which is the sum of:

- (i) the Capital Resources of the Parent of the Financial Group;
  - (ii) subject to (4), the Capital Resources of any Authorised Firms and Financial Institutions included in the Financial Group; and
  - (iii) subject to (4), the Financial Group's proportionate share of Capital Resources in Financial Institution participations included in the Financial Group.
- (2) If an Authorised Firm uses the accounting consolidation method in (1)(a), the Authorised Firm's Financial Group need not deduct illiquid assets from the Financial Group's Capital Resources.
- (3) An Authorised Firm whose Financial Group does not deduct illiquid assets from the Financial Group's Capital Resources must:
  - (a) ensure that its Financial Group complies with the liquidity systems and control requirements set out in section 6.2; and
  - (b) notify the DFSA in writing that the Financial Group will not deduct illiquid assets from its Financial Group's Capital Resources.
- (4) For the purposes of (1)(b)(i) and (ii) an investment by one Financial Group member in another must not be included.

**Guidance**

The calculation of Financial Group Capital Resources is subject to section 2.8 which describes the limits on the use of different forms of capital.

**7.3.5** When calculating the Financial Group Capital Resources of a Financial Group, an Authorised Firm must not include Capital Resources or Adjusted Capital Resources (as the case may be) of subsidiaries or participations of that Financial Group to the extent that those Capital Resources or Adjusted Capital Resources:

- (a) exceed the entity requirement in respect of that subsidiary or participation, calculated in accordance with Rule 7.3.3; and
- (b) are not freely transferable within the Financial Group.

**Guidance**

1. Because the Financial Group Capital Requirement set out in Rule 7.3.3 includes capital requirements in respect of Group entities, capital resources may be included in the calculation of Financial Group Capital Resources to the extent of those requirements. Capital that is surplus to those requirements is however subject to an additional condition before it may be taken into account for the purposes of Financial Group capital adequacy.

2. In general, Capital Resources or Adjusted Capital Resources are considered not to be freely transferable if they are subject to a legal or constructive limitation on their transferability, whether that transfer would be made by dividend, return of capital or other form of distribution. Examples of relevant limitations might include obligations to maintain minimum capital requirements to meet domestic solvency requirements, or to comply with debt covenants.
- 7.3.6** Deductions for material holdings and Qualifying Holdings under Rules 2.7.5 and 2.7.6 respectively may be calculated based on the Group's total Tier One and Tier Two capital.

## **7.4 Financial group concentration risk limits**

- 7.4.1** An Authorised Firm must ensure that its Financial Group Exposure, including the Financial Group PSIAs, to a Counterparty or group of Closely Related Counterparties does not exceed 25% of its Group's Capital Resources.
- 7.4.2** An Authorised Firm must ensure that the sum of its Financial Group Large Exposures, including the Financial Group's PSIAs, to a Counterparty or group of Closely Related Counterparties does not exceed 800% of its Financial Group's Capital Resources.

## 8 OPERATIONAL RISK

### Guidance

No Rules are currently in existence in respect of the prudential treatment of operational risk. However, Rules and Guidance are included in other modules of the Rulebook, primarily in GEN which addresses systems and controls in respect of risk and sets out DFSA's approach to risk based supervision.



## **APP1 GENERAL REQUIREMENTS - DETAIL IN THE TRADING BOOK**

### **A1.1 How to include positions in the trading book**

**A1.1.1** An Authorised Firm which is required to have a Trading Book must include positions in its Trading Book on a consistent basis.

**A1.1.2** An Authorised Firm must include every position that is not included in the Trading Book in its Non-Trading Book.

**A1.1.3** An Authorised Firm must value every position included in its Trading Book and the Non-Trading Book in accordance with the relevant accounting standards and practices.

### **A1.2 Value of trading book positions**

**A1.2.1** (1) In calculating the value of positions for the purposes of Rule 1.4.1(c) an Authorised Firm must value:

- (a) equities and debt instruments at their market prices;
- (b) derivatives according to the values of the underlying; and
- (c) underwriting positions according to the market value of the underlying Securities.

(2) An Authorised Firm must sum all long and short positions (ignoring the sign) to calculate its total Trading Book size.

### **A1.3 Positions included in the trading book**

**A1.3.1** An Authorised Firm must include in its Trading Book, subject to the Rules on trading intent and hedging Non-Trading Book Exposures:

- (a) each proprietary position in a Financial Instrument, commodity and commodity derivative which is held for resale or which is taken on with the intention of benefiting in the short term from actual or expected differences between buying and selling prices, or from other price or interest rate variations;
- (b) each matched principal broking position in a Financial Instrument, commodity and commodity derivative;

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- (c) each position taken in order to hedge another element of the Trading Book;
- (d) each Exposure due to a repurchase agreement (repo), or Securities and commodities lending, which is based on a Security or commodity included in the Trading Book;
- (e) each Exposure due to a reverse repurchase agreement (reverse repo), or Securities and commodities borrowing transaction included in the Trading Book;
- (f) each Exposure arising from an unsettled transaction, free delivery or over-the-counter (OTC) derivative; and
- (g) each Exposure in the form of a fee, commission, interest, dividend or margin on an exchange-traded derivative directly related to the items included in the Trading Book.

**Guidance**

1. Whenever an Authorised Firm acts as principal (even in the context of activity normally described as ‘broking’ or ‘customer business’), positions should be assigned to the Trading Book. This applies even if the nature of the business means that the only risks being incurred by the Authorised Firm are Counterparty risks (that is, no Market Risk Capital Requirements apply).
2. Based on Rule A1.3.1, a position includes any interest, dividends or other benefits accruing where these are recognised and included in the quoted prices of an investment.

**A1.3.2** Loans and traded loans are not financial instruments for the purposes of PIB and an Authorised Firm must not include them in its Trading Book unless the loans have been used to hedge a Trading Book transaction.

**Trading intent**

- A1.3.3**
- (1) An Authorised Firm must not include in its Trading Book a position in a financial instrument, commodity or commodity derivative unless held with trading intent.
  - (2) A position in a financial instrument, commodity or commodity derivative is held with trading intent if:
    - (a) it is taken on with the intention of:
      - (i) benefiting in the short term from actual or expected differences between buying and selling prices not including positions held for liquidity management purposes;
      - (ii) benefiting from other price or interest-rate variations;
      - (iii) locking in arbitrage profits; or

- (iv) market making;
- (b) it is marked to market or marked to model regularly on a prudent and consistent basis, as part of the Authorised Firm's internal risk management processes;
- (c) position-takers at the Authorised Firm have autonomy in entering into or changing transactions within pre-determined limits, or the position satisfies other criteria which the Authorised Firm applies to the composition of its Trading Book;
- (d) there is an appropriate documented trading strategy for the position, approved by senior management; and
- (e) active monitoring of the position is undertaken using market information sources.

## **A1.4 Repurchase and reverse repurchase agreements**

**A1.4.1** If an Authorised Firm has a Trading Book it may include in it an Exposure due to a repurchase agreement, reverse repurchase agreement, Securities and commodities borrowing, or Securities and commodities lending transactions if:

- (a) the Exposure is marked to market daily (cash borrowed or lent under a repurchase agreement or a reverse repurchase agreement may be included in the Trading Book even if not marked to market provided that the Residual Maturity of the borrowing or lending is one month or less);
- (b) the Collateral is adjusted to take account of changes in the value of the Securities or commodities involved;
- (c) the agreement or transaction provides for the Authorised Firm's claims to be automatically and immediately offset against its Counterparty's claims if the latter defaults; and
- (d) such agreements and transactions are confined to their accepted and appropriate use and artificial transactions, especially those not of a short-term nature, are excluded.

### **Guidance**

Cash items include loans and deposits and the cash legs of repurchase, stock borrowing, reverse repurchase and stock lending transactions.

**A1.4.2** Where the conditions under Rule A1.4.1 are not met, an Authorised Firm must include an Exposure arising under a Repurchase Agreement, Reverse Repurchase Agreement securities and commodities borrowing or securities and commodities lending in its Non-Trading Book.

**Guidance**

The Non-Trading Book treatment for such Exposures is set out in Rule A4.8.28 and Rule A4.8.29.

**A1.5 Hedging of a trading book exposure by a non-financial instrument**

**A1.5.1** An Authorised Firm may hedge a Trading Book Exposure, completely or partially, by a specific instrument that is not listed in A1.3.1. The General Market Risk Exposure associated with the non-financial instrument may be incorporated into the calculation of General Market Risk in the Trading Book if:

- (a) the specific instrument is used to hedge an Exposure in an Authorised Firm's Trading Book;
- (b) the hedge position satisfies the Netting rules contained in the relevant sections of the Market Risk section; and
- (c) the hedge position is marked to market or marked to model and is valued regularly on a prudent and consistent basis.

**Guidance**

If the conditions for incorporating the non-financial instrument in the calculation of general market risk in the Trading Book under Rule A1.5.1 are not met, they will be treated as Non-Trading Book items.

**A1.5.2** For the purposes of Rule A1.5.1, the specific instrument must be treated as attracting capital charges as if it were a financial instrument.

**Guidance**

For the purposes of section A1.5, a loan will attract General Market Risk (see chapter 5) and Counterparty risk (see chapter 4) on the marked-to-market valuation.

**A1.6 Hedging a non-trading book exposure by a specific financial instrument****Guidance**

A Non-Trading Book Exposure may be hedged, completely or partially, by a specific financial instrument that is normally considered to be eligible to be part of the Trading Book.

**A1.6.1** If a specific financial instrument is used to hedge an Exposure in an Authorised Firm's Non-Trading Book, an Authorised Firm may take it out of the Trading Book for the period of the hedge and include it in the Non-Trading Book.

## **A1.7 Transfer of general market risk between the trading book and the non-trading book**

### **Guidance**

1. General Market Risk arising from the Trading Book may hedge Non-Trading Book positions without reference to specific financial instruments. This is distinct from the Guidance to section A1.6, which relates to the use of specific financial instruments to hedge Non-Trading Book Exposures.
2. An Authorised Firm may achieve the transfer of General Market Risk between the Trading Book and Non-Trading Book by entering into a notional legal agreement between the Trading Book and Non-Trading Book as if they were third parties.

### **A1.7.1 An Authorised Firm must ensure that:**

- (a) a transfer of General Market Risk between its Trading Book and Non-Trading Book is subject to appropriate documentation and evidenced by a clear audit trail;
- (b) positions held in its Non-Trading Book that are being hedged by General Market Risk arising from positions in the Trading Book remain in the Non-Trading Book; and
- (c) the General Market Risk Exposure associated with the positions in the Non-Trading Book is incorporated into the calculation of General Market Risk in the Trading Book.

### **Guidance**

An example of the application of Rule A1.7.1(c) is as follows:

- a. A Firm may have a fixed-rate loan portfolio in the Non-Trading Book. Although the Non-Trading Book does not attract a regulatory capital charge for interest rate risk, the portfolio is subject to interest rate risk. Firms may prefer to transfer this risk to the Trading Book where it may be actively managed.
- b. The Firm may transfer this interest rate risk by entering into, for example, a fixed versus floating rate swap between the Trading Book and the Non-Trading Book. The notional long and short positions created as result of the swap are recorded in the Trading Book, and the swap positions may be treated as financial instruments provided that appropriate documentation is in place (see Rule A1.7.2 below). The General Market Risk Requirements associated with the swap legs are allocated to the appropriate Trading Book General Market Risk bucket and thus may reduce the overall General Market Risk Requirement in the Trading Book.
- c. For a Firm to undertake such a transaction there should be existing positions in the Trading Book, which result in a sufficient General Market Risk Requirement to offset the General Market Risk created as a result of the swap.

- A1.7.2** Appropriate documentation under A1.7.1 must cover:
- (a) details of the instruments or Exposures being transferred and the method used to transfer; and
  - (b) the pricing of the transfer.

**Guidance**

1. Separate documentation need not be produced for every transfer. If the same method is used for a number of transfers, a single document detailing the procedures will suffice. However, an Authorised Firm must still be able to distinguish transactions that have been undertaken for risk transfer purposes from other transactions.
2. Arm's-length prices must be used in any transfer. 'Arm's-length' means the prevailing market price for the particular transaction.

## **APP2 CAPITAL**

### **A2.1 Stress and scenario testing**

#### **Guidance**

1. Stress and scenario testing seeks to anticipate possible losses or risks that might occur or become manifest. In applying them an Authorised Firm needs to decide how far forward to forecast and may want to consider the following factors:
  - a. how quickly it would be able to identify events or changes in circumstances that might lead to a loss occurring or risk crystallising; and
  - b. after the event or circumstance has been identified, how quickly and effectively the Authorised Firm could act to prevent or mitigate any resulting loss occurring or risk crystallising and to reduce its exposure to any further adverse event or change in circumstance.
2. For example, the time horizon over which stress and scenario testing would need to be carried out for the Market Risk arising from the holding of investments would depend upon:
  - a. the extent to which there is a regular, open and transparent market in those assets, which would allow fluctuations in the value of the investment to be more readily and quickly identified; and
  - b. the extent to which the market in those assets is liquid (and would remain liquid in the changed circumstances contemplated in the stress or scenario test) which would allow the Authorised Firm, if needed, to sell its holding so as to prevent or reduce its exposure to future price fluctuations.
3. Authorised Firms should focus on those scenarios and combinations of scenarios that are considered reasonably likely to occur. For this purpose other risks and losses include business risk, i.e. the potential impact of changes in business plans, future activities, and the business or economic environment.
4. In identifying what realistic combinations of losses or risks might occur or crystallise, an Authorised Firm should take into account scenarios in which expected correlations occur and where they might break down.
5. In identifying scenarios and assessing their impact, an Authorised Firm should take into account how changes in circumstances might impact upon:
  - a. the nature, scale and mix of future activities; and
  - b. the behaviour of Counterparties, and of the Authorised Firm itself, including the exercise of choices (including options embedded in financial instruments).
6. In determining whether it would have adequate financial resources in the event of each identified adverse scenario, an Authorised Firm should:
  - a. only include financial resources that could reasonably be relied upon as being available in the circumstances of the identified scenario; and
  - b. consider any legal or other restriction on the purposes for which financial resources may be used, including any restriction on the transfer to the DIFC of assets held overseas.



**APP3 NOT CURRENTLY IN USE**



## **APP4 CREDIT RISK**

### **A4.1 Abbreviations**

#### **Guidance**

Rule 4.1.2 sets out the abbreviations which are used in respect of Credit Risk as follows:

- a. CCF = credit conversion factor;
- b. CEA = the Credit Equivalent Amount;
- c. CPCOM = an Authorised Firm's Counterparty Risk Component;
- d. CPW = the appropriate Counterparty weighting;
- e. CPX = the amount of the Exposure;
- f. CRCOM = an Authorised Firm's Credit Risk Component;
- g. CV = contracted value for delivery;
- h. MV = market value;
- i. NP = nominal principal amount;
- j. OTC = over the counter;
- k. PFCE = amount to capture Potential Future Credit Exposure; and
- l. T = trade date, the date on which a transaction is entered into.

### **A4.2 Credit risk systems and controls**

#### **Guidance**

1. Depending on an Authorised Firm's nature, scale, frequency, and complexity of Credit Risk granted or incurred, senior management of an Authorised Firm should consider whether the Credit Risk policy should include the following:
  - a. how, with particular reference to its activities, the Authorised Firm defines and measures Credit Risk;
  - b. the Authorised Firm's business aims in incurring Credit Risk including:
    - i. identifying the types and sources of Credit Risk to which the Authorised Firm wishes to be exposed (and the limits on that Exposure) and those to which the Authorised Firm wishes not to be exposed;
    - ii. specifying the level of diversification required by the Authorised Firm and the Authorised Firm's tolerance for risk concentrations and the limits on those Exposures and concentrations; and
    - iii. stating the risk-return that the Authorised Firm is seeking to achieve on Credit Risk Exposures.

- c. how Credit Risk is assessed both when credit is granted or incurred and subsequently, including how the adequacy of any security and other risk mitigation techniques are assessed;
- d. the detailed limit structure for Credit Risk, which should:
  - i. address all key risk factors, including intra-group Exposures;
  - ii. be commensurate with the volume and complexity of activity; and
  - iii. be consistent with the Authorised Firm's business aims, historical performance, and the level of capital the Authorised Firm is willing to risk;
- e. procedures for:
  - i. approving new products and activities which give rise to Credit Risk;
  - ii. regular risk position and performance reporting;
  - iii. limit exception reporting and approval; and
  - iv. identifying and dealing with problem Exposures;
- f. the allocation of responsibilities for implementing the Credit Risk policy and for monitoring adherence to, and the effectiveness of, the policy; and
- g. the required information systems, staff and other resources.

### **Counterparty risk assessment**

- 2. The Authorised Firm should make a suitable assessment of the risk profile of its Counterparties. The factors to be considered will vary according to both the type of credit and Counterparty such as whether the Counterparty is a company or a sovereign Counterparty and may include:
  - a. the purpose of the credit and the source of repayment;
  - b. an assessment of the skill, integrity and quality of management and overall reputation of the Counterparty;
  - c. the legal capacity of the Counterparty to assume the liability to the Authorised Firm;
  - d. an assessment of the nature and amount of risk attached to the Counterparty in the context of the industrial sector or geographical region or country in which it operates and the potential impact on the Counterparty of political, economic and market changes; this assessment may include consideration of the extent and nature of the Counterparty's other financial obligations;
  - e. the Counterparty's repayment history as well as an assessment of the counterparty's current and future capacity to repay obligations based on financial statements, financial trends, cashflow projections and the potential impact of adverse economic scenarios;
  - f. an analysis of the risk-return trade-off, with regard to the proposed price of the credit facility;

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- g. the proposed terms and conditions attached to the granting of credit, including ongoing provision of information by the Counterparty, covenants attached to the facility, the adequacy and enforceability of Collateral and guarantees; and
  - h. the Authorised Firm's existing Exposure to the individual Counterparty, sector, country or product and the availability of credit given Exposure limits.
- 3. An Authorised Firm should document any variation from the usual credit policy.
- 4. An Authorised Firm involved in loan syndications or consortia should not rely on other parties' assessments of the Credit Risks involved but should conduct a full assessment against its own Credit Risk policy.
- 5. Connected Counterparties should be identified and the procedures for the management of the combined Credit Risk considered. It may be appropriate for Authorised Firms to monitor and report the aggregate Exposure against combined limits in addition to monitoring the constituent Exposures to the individual Counterparties.
- 6. An Authorised Firm should consider whether it needs to assess the credit-worthiness of suppliers of goods and services to whom it makes material prepayments or advances.

**Risk assessment: derivative counterparties**

- 7. An Authorised Firm should include in its Credit Risk policy an adequate description of:
  - a. how it determines with which derivative Counterparties to do business;
  - b. how it assesses and continues to monitor the credit-worthiness of those Counterparties;
  - c. how it identifies its actual and contingent Exposure to the Counterparty; and
  - d. whether and how it uses credit loss mitigation techniques, e.g. margining, taking security or Collateral or purchasing credit insurance.
- 8. In assessing its contingent Exposure to a Counterparty, the Authorised Firm should identify the amount which would be due from the Counterparty if the value, index or other factor upon which that amount depends were to change.

**Risk control**

- 9. An Authorised Firm should consider setting credit limits for maximum Exposures to single and connected Counterparties, as well as limits for aggregate Exposures to economic sectors, geographic areas, and on total Credit Risk arising from specific types of products. By limiting Exposures in these categories, an Authorised Firm can manage credit Exposure more carefully and avoid excessive concentrations of risk.
- 10. An Authorised Firm in Category 1, 2, 3 or 5 is also subject to concentration limits and notification requirements in chapter 4.

**Risk measurement**

- 11. An Authorised Firm should measure its Credit Risk using a robust and consistent methodology, which should be described in its Credit Risk policy. The Authorised Firm should consider whether the measurement methodology should be back-tested and the frequency of any such back-testing.

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12. An Authorised Firm should also be able to measure its total Exposure across the entire credit portfolio or within particular categories such as Exposures to particular industries, economic sectors or geographical areas.
13. Where an Authorised Firm is a member of a Group, the Group should be able to monitor credit Exposures on a consolidated basis.
14. An Authorised Firm should have the capability to measure its credit Exposure to individual Counterparties on at least a daily basis.

**Risk monitoring**

15. An Authorised Firm should implement an effective system for monitoring its Credit Risk, which should be described in its Credit Risk policy. The system may monitor the use of facilities, adherence to servicing requirements and covenants, and monitor the value of Collateral and identify problem accounts.
16. An Authorised Firm should consider the implementation of a system of management reporting which provides relevant, accurate, comprehensive, timely and reliable Credit Risk reports to relevant functions within the Authorised Firm.
17. An Authorised Firm should have procedures for taking appropriate action according to the information within the management reports, such as a review of Counterparty limits.
18. Particular attention should be given to the monitoring of credit that does not conform to usual Credit Risk policy, or which exceeds predetermined credit limits and criteria, but is sanctioned because of particular circumstances. Unauthorised exceptions to policies, procedures and limits should be reported in a timely manner to the appropriate level of management.
19. Individual credit facilities and overall limits and sub-limits should be periodically reviewed in order to check their performance and appropriateness for both the current circumstances of the Counterparty and in the Authorised Firm's current internal and external economic environment. The frequency of review will usually be more intense for higher-risk Counterparties or larger Exposures or in fluctuating economic conditions.
20. Appropriate stress testing of credit Exposures can be an essential part of the credit management process. Examination of the potential effects of economic or industry downturns, market events, changes in interest rates, changes in foreign exchange rates and changes in Liquidity conditions can provide valuable information about an Authorised Firm's Credit Risk. This information can be utilised to inform the Authorised Firm's ongoing credit strategy.
21. As new techniques for Credit Risk management, monitoring and reporting are developed, the Authorised Firm should ensure they are tested and evaluated before undue reliance is placed upon them.

**Problem exposures**

22. An Authorised Firm should have processes for the timely identification and management of problem Exposures. These processes should be described in the Credit Risk policy.
23. Depending on the size and nature of the Authorised Firm, it may be appropriate for problem Exposures to be managed by a specialised function, independent of the functions that originate the business or maintain the ongoing business relationship with the Counterparty.

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24. Exposures identified as problems or potential problems should be closely monitored by management, and an Authorised Firm should set out, for example, whether a loan grading system or a watch or problem list is used and, in the latter case, the criteria for adding an asset to or taking an asset off that list.
25. An Authorised Firm should have adequate procedures for recovering Exposures in arrears or those which had provisions made against them. These should allocate responsibility both internally and externally for its arrears management and recovery and define the involvement of the Authorised Firm's solicitors.
26. Requirements relating to provisioning against loss on problem Exposures are covered in chapter 4.

**Risk mitigation**

27. Various methods can be used to mitigate Credit Risk, such as taking security or Collateral, obtaining a guarantee from a third party, purchasing insurance or Credit Derivatives. Authorised Firms should view these as complementary to, rather than a replacement for, thorough credit analysis and procedures.
28. If an Authorised Firm takes security or Collateral on credit facilities, appropriate policies and procedures should be documented covering:
  - a. the types of security or Collateral considered;
  - b. procedures governing the valuation and revaluation of security or Collateral including the basis of valuation;
  - c. policies governing the taking of security or Collateral, including obtaining appropriate legal title; and
  - d. policies governing possession of security or Collateral.
29. The value of security and Collateral should be monitored at an appropriate frequency. For example, commercial property might be revalued annually, whereas Securities provided as Collateral should be marked to market usually on a daily basis. Residential property may not need to be revalued annually, but information should be sought as to general market conditions.
30. When taking Collateral in support of an Exposure, an Authorised Firm should ensure that legal procedures have been followed, to ensure the Collateral can be enforced if required.
31. An Authorised Firm should consider the legal and financial ability of a guarantor to fulfil the guarantee if called upon to do so.
32. The Authorised Firm should analyse carefully the protection afforded by risk mitigants such as Netting agreements or Credit Derivatives, to ensure that any residual Credit Risk is identified, measured, monitored and controlled.
33. An Authorised Firm providing mortgages at high loan-to-value ratios should consider the need for alternative forms of protection against the risks of such lending, including mortgage indemnity insurance, to protect against the risk of a fall in the value of the property.

**Record keeping**

34. The Authorised Firm should maintain appropriate records of:
  - a. credit Exposures, including aggregations of credit Exposures, by:

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- i. Groups of Connected Counterparties; and
    - ii. Types of Counterparty as defined, for example, by the nature or geographical location of the Counterparty;
  - b. credit decisions, including details of the facts or circumstances upon which a decision was made; and
  - c. information relevant to assessing current credit quality.
35. Credit records should be retained for at least six years, subject to any requirement in the Rules requiring such records to be kept for a longer period.
36. It is important that sound and legally enforceable documentation is in place for each credit agreement as this may be called upon in the event of a default or dispute. An Authorised Firm should therefore consider whether it is appropriate for an independent legal opinion to be sought on documentation used by the Authorised Firm. Documentation should be in place before the Authorised Firm enters into a contractual obligation or releases funds.

**Country risk exposure**

37. Chapter 4 does not provide limits on the size of an Authorised Firm's Exposure to a particular country or region. However, an Authorised Firm which has large Exposures in a country or region should include in its Credit Risk policy:
- a. the geographical areas in which the Authorised Firm does or intends to do business;
  - b. its definition of 'Credit Risk' and 'Exposure' in each country or region;
  - c. how to measure its total Exposure in each country or region and across several countries or regions;
  - d. the types of business the Authorised Firm intends to undertake in each country or region;
  - e. limits on Exposures to an individual country or region which the Authorised Firm deals with, and sub-limits for different types of business if appropriate;
  - f. the procedure for setting and reviewing country or regional limits; and
  - g. the process by which the Authorised Firm's actual country or regional Exposures will be monitored against limits and the procedure to be followed if the limits are breached.
38. When setting country or regional limits, an Authorised Firm should consider:
- a. the economic and political circumstances prevailing in the country or region;
  - b. the type and maturity of business undertaken by the Authorised Firm in a particular country or region;
  - c. the Authorised Firm's existing concentration of country or regional risk;
  - d. the source of funding for the country or regional Exposure; and
  - e. sovereign or other guarantees offered.

**Provisioning**

39. Depending upon the nature of the Authorised Firm and its business, the Authorised Firm's provisioning policy should set out:
- a. who has responsibility for reviewing the provisioning policy and approving any changes;
  - b. how frequently the policy should be reviewed;
  - c. when the review will take place, including the circumstances in which a review might be more frequent;
  - d. who has primary responsibility for ensuring the provisioning policy remains appropriate, including any division of responsibilities;
  - e. the areas of its business to which the provisioning policy relates;
  - f. where it takes different approaches to different lines of its business and the key features of those differences; and
  - g. who has responsibility for monitoring its asset portfolio on a regular basis in order to identify problem or potential problem assets and the factors it takes into account in identifying them.
  - h. whether a loan grading system or a watch or problem list is used and, in the latter case, the criteria for adding an asset to or taking an asset off that list;
  - i. the extent to which the value of any collateral, guarantees or insurance which the Authorised Firm holds affects the need for or size of provision;
  - j. on what basis the Authorised Firm makes its provisions, including the extent to which the level of provisioning is left to managerial judgement or to a committee or involves specified formulae and the methodologies or debt management systems and other formulae used to determine provisioning levels for different business lines and the factors applied within these methodologies;
  - k. who is responsible for ensuring that the Authorised Firm's provisioning policy is being implemented properly, and the measures the Authorised Firm has in place if its provisioning policies are not adhered to;
  - l. who is responsible for the regular reviews of the Authorised Firm's specific and general provisions and who decides whether provision levels are satisfactory. The reviews should take account of changes in the status of the Exposures and potential losses and changes in the conditions associated with them;
  - m. the reports used to enable management to ensure that the Authorised Firm's provisioning levels remain satisfactory, the frequency and purpose of those reports and their circulation;
  - n. the procedures for recovering Exposures in arrears or Exposures which have had provisions made against them, including who has responsibility both internally and externally for its arrears management and recovery and the involvement of the Authorised Firm's solicitors;
  - o. the procedures and methodologies for writing off and writing back provisions, including treatment of interest and who has the relevant responsibility for determining these; and

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- p. the frequency of any review of its write off experience against provisions raised; such a review can help identify whether an Authorised Firm's policies result in over or under provisioning across the business cycle, and contribute to a general review of an Authorised Firm's provisioning policy and the design of any loan grading systems, Credit Risk models, and risk pricing; and
  - q. the Authorised Firm's procedures and methodologies for calculating and raising provisions for contingent and other liabilities, how frequently they should be reviewed and who has the relevant responsibilities. Other liabilities include the crystallisation of contingent liabilities such as acceptances, endorsements, guarantees, performance bonds, indemnities, irrevocable letters of credit and the confirmation of documentary credits.
40. Provisions may be general (against the whole of a given portfolio) or specific (against particular Exposures identified as bad or doubtful), or both. The DFSA expects contingent liabilities and anticipated losses to be recognised in accordance with the applicable accounting standards.
41. Appropriate systems and controls for provisions vary with the nature, scale and complexity of the credit granted. An Authorised Firm for which the extension of credit is a substantial part of its business is expected to have greater regard to developing, implementing and documenting a provisioning policy than an Authorised Firm for which Credit Risk is incidental to the operation of its business.
42. The DFSA recognises that the frequency with which an Authorised Firm reviews its provisioning policy once it has been established will vary from Authorised Firm to Authorised Firm. However, the DFSA expects an Authorised Firm to review its policy to ensure it remains appropriate for the business it undertakes and the economic environment in which it operates.

### **A4.3 Credit risk in the non-trading book**

#### **Guarantees**

**A4.3.1** An Authorised Firm may reduce the risk weighting on a Non-Trading Book item, that has been directly, explicitly, irrevocably and unconditionally guaranteed by a third party to the risk weighting of the guarantor where the risk weighting of the guarantor is lower than that for the underlying borrower or Counterparty.

**A4.3.2** In Rule A4.3.1:

- (a) 'Directly' means that the guarantee must represent a direct claim on the guarantor;
- (b) 'Explicitly' means that the guarantee must be linked to a specific Exposure or Exposures, so that the extent of the guarantee's coverage is clearly defined;
- (c) 'Irrevocably' means that the guarantee must contain no clause that would allow the guarantor unilaterally to cancel the guarantee; and
- (d) 'Unconditionally' means that the guarantee must contain no clause that might prevent the guarantor from being obliged to pay out in a timely



manner if the borrower or obligor fails to make the payment or payments due to the Authorised Firm.

**A4.3.3** The Authorised Firm must also obtain a written, reasoned and reputable external legal opinion confirming that the guarantee is:

- (a) legally well founded in all relevant jurisdictions; and
- (b) enforceable in the default, bankruptcy, liquidation or other similar circumstances affecting either the Counterparty or the Authorised Firm.

**Guidance**

An Authorised Firm may rely on standard guarantee agreements but should check with its legal advisors in respect of each such transaction that the above requirements are met.

**A4.3.4** An Authorised Firm that has guaranteed an Exposure to a borrower jointly and severally must consider its share of the guarantee, as explicitly defined or otherwise equal to the total value of the guarantee divided by the number of guarantors, as an Exposure on the borrower and the balance as an Exposure on the other guarantors.

**Risk weighting framework**

**100% weightings**

**A4.3.5** The CPW is 100% for all on-balance sheet assets unless a reduced risk weighting applies.

**Guidance**

1. The items below are examples of assets which attract a 100% CPW:
  - a. claims on individual and corporate persons, and on commercial entities owned by the public sector;
  - b. claims on deposit-takers and principal dealers authorised in a Zone 2 country, with a Residual Maturity over one year;
  - c. claims on Zone 2 central governments and central banks (unless the claim is denominated in the national currency of the borrower and funded by the borrower by liabilities in the same currency);
  - d. claims on Zone 2 regional governments or Local Authorities;
  - e. claims on Zone 2 Public Sector Entities;
  - f. Collective Investment Funds;
  - g. premises, plant, equipment and other fixed assets;
  - h. real estate, and property developments; and
  - i. trade investments, unsecured loans, prepayments, accrued income, and sundry debtors.
2. Other risk weightings are set at 50% related to residential mortgages, 20%, 10%, and 0%.

**50% weightings**

**A4.3.6** The following items attract a 50% CPW:

- (a) loans fully secured on residential property which is (or is to be) owned and occupied by the borrower, or is rented by the borrower;
- (b) mortgage-backed Securities (MBS) issued by a mortgagor or a Special Purpose Vehicle, provided that the following conditions are met:
  - (i) the MBS embody an express promise to repay the bearer;
  - (ii) the issue documentation contains provisions which would enable any noteholder to initiate legal proceedings directly against the issuer of the MBS;
  - (iii) the issue documentation contains provisions which should ultimately enable the noteholders, individually or collectively, to acquire the legal title to the underlying mortgage assets and to realise these assets if the issuer defaults;
  - (iv) the mortgage loans meet the conditions in (a) above;
  - (v) the mortgage loans are not in default when they are transferred to the vehicle; and
  - (vi) subject to (g), the Special Purpose Vehicle's activities are restricted to mortgage business.
- (c) 'Fully secured' means a first priority charge on the property, the value of which is greater than or equal to the amount of the loan. A second charge may also be included where an Authorised Firm already has a first priority charge on the property concerned.
- (d) If a mortgage loan subsequently becomes less than fully secured, the CPW of that loan increases to 100% unless the shortfall in security is fully covered by a specific provision, in which case the CPW remains 50%.
- (e) For the purposes of interpretation, there is no requirement for an Authorised Firm to revalue a property on a regular basis, but where a revaluation has taken place and reveals that the loan to value ratio has risen above 100% (that is the loan is not fully secured), the CPW on that loan increases to 100%. Conversely, where a revaluation indicates that the loan to value ratio has fallen to or below 100%, the loan may be weighted at 50% because it is fully secured.
- (f) In relation to a mortgage loan, 'in default' means that the borrower has missed more than two monthly payments, or that the Authorised Firm has taken enforcement proceedings or other legal steps to recover any amount overdue.
- (g) A Special Purpose Vehicle still qualifies as such if it holds assets (such as government bonds or Securities) qualifying for a CPW of 50% or less.

**20% weightings**

**A4.3.7** The following items attract a 20% CPW:

- (a) claims on Multilateral Development Banks;
- (b) claims on deposit-takers authorised in a Zone 1 country;
- (c) claims on deposit-takers, authorised in a Zone 2 country, with a Residual Maturity of one year or less;
- (d) cash items in the course of collection;
- (e) claims on Zone 1 regional governments, Local Authorities, and Public Sector Entities;
- (f) claims on principal dealers authorised in a Zone 1 country;
- (g) claims on Zone 1 clearing houses and exchanges;
- (h) Zone 1 central government and central bank fixed rate bills and Securities with a Residual Maturity of over one year;
- (i) Zone 2 central government and central bank bills and Securities with a Residual Maturity of over one year, denominated in the national currency of the borrower and funded by the Authorised Firm by liabilities in the same currency; and
- (j) claims on Category 5 Authorised Firms.

**10% weightings**

**A4.3.8** The following items attract a 10% CPW:

- (a) Zone 1 central government and central bank fixed interest-rate paper with a Residual Maturity of one year or less;
- (b) Zone 1 central government and central bank floating-rate paper of any maturity; and
- (c) Zone 2 central government and central bank paper with a Residual Maturity of one year or less, denominated in the national currency of the borrower and funded by the Authorised Firm in the same currency.

**0% weightings**

**A4.3.9** The following items attract a 0% CPW:

- (a) cash;
- (b) gold bullion including Tola Bars;
- (c) claims on Zone 1 central governments and central banks, other than holdings of bills, paper or Securities issued by them;

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- (d) claims on Zone 2 central governments and central banks, other than holdings of bills, paper and Securities issued by them, if the claims are denominated in the national currency of the borrower and funded by the Authorised Firm in the same currency; and
- (e) claims on a Connected Counterparty which is a member of an Authorised Firm's Group and which is incorporated in the DIFC.

**Off-balance sheet risk: credit conversion factors****100% CCF**

**A4.3.10** For the purpose of calculating the Credit Risk for off-balance sheet transactions, other than OTC derivatives contracts, free deliveries and unsettled transactions, the CCF will be 100% unless reduced CCF applies.

**Guidance**

1. The following are examples of transactions which attract a 100% CCF:
  - a. direct credit substitutes;
  - b. sale and repurchase agreements, and transactions with recourse where the Credit Risk remains with the Authorised Firm; and
  - c. forward asset purchases, forward deposits placed and the unpaid part of partly-paid Securities.
2. Direct credit substitutes are transactions where the risk of loss to the Authorised Firm 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. Examples of direct credit substitutes include general guarantees of indebtedness, irrevocable standby letters of credit (serving as financial guarantees), acceptances and endorsements.
3. A forward deposit is an agreement between two parties under which one will pay and the other receive an agreed rate of interest on a deposit to be placed by one party with the other party at some predetermined date in the future. The weight is determined according to the Counterparty with which the deposit will be placed.
4. Foreign currency spot deposits with value dates one or two business days after the trade date are not treated as forward deposits.
5. If an Authorised Firm holds partly-paid Securities, the unpaid part attracts a 100% CCF.

**50% CCF**

**A4.3.11** The following transactions attract a 50% CCF:

- (a) transaction-related contingent items not having the character of direct credit substitutes;
- (b) note issuance facilities and revolving underwriting facilities;
- (c) other undrawn credit commitments with an Original Maturity of over one year and which are not unconditionally cancellable at any time; and

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- (d) undrawn credit facilities with an Original Maturity of up to one year and rolling undated or open ended commitments that do not meet the requirements of Rules A4.3.13 and A4.3.14.

**Guidance**

1. Transaction-related contingent items are transactions where the risk of loss to the Authorised Firm depends on the likelihood of a future event, which is independent of the creditworthiness of the Counterparty. Examples include the calling of performance bonds, bid bonds, customs and tax bonds, warranties, and standby letters of credit related to specific transactions, not having the character of credit substitutes.
2. Examples of undrawn commitments include formal standby facilities and unused lines of credit.
3. An Authorised Firm should refer to section A4.4 to determine the original maturity of a commitment.

**20% CCF**

- A4.3.12** Documentary credits in which the underlying shipment acts as Collateral and other self-liquidating trade-related contingencies must attract a 20% CCF.

**0% CCF**

- A4.3.13** Endorsements of bills which had previously been accepted by any Authorised Firm in Category 1 or Category 5 or by a Zone 1 deposit taker and undrawn credit facilities with an Original Maturity of up to one year or which can be cancelled unconditionally at any time must attract a 0% CCF.

**Guidance**

An Authorised Firm should refer to section A4.4 to determine the original maturity of a commitment.

- A4.3.14** Rolling, undated or open-ended commitments (for example, overdrafts) do not attract 0% CCF unless they are also cancellable unconditionally at any time without notice, and subject to a credit review by the Authorised Firm at least annually. Such commitments which are not unconditionally cancellable at any time attract 50% CCF.

**Off-balance sheet risk: CPW**

- A4.3.15** The CPW of a repurchase agreement must be determined by reference to the issuer of (or, if not applicable, the obligor under) the asset subject to the agreement, and not to the Counterparty to the repurchase agreement.

**Guidance**

An Authorised Firm that has sold the Securities in a repurchase agreement transaction retains issuer risk on the Securities and not risk on the repurchase agreement Counterparty.

- A4.3.16** The CPW of a reverse repurchase agreement must be determined as if the agreement were a collateralised loan to the Counterparty to the repurchase agreement.

**Guidance**

1. Counterparty risk only arises on reverse repurchase agreements when the Securities are not Acceptable Collateral or are worth less than the cash paid out. In both cases, an Authorised Firm's Counterparty Risk may be reduced by Netting.
2. Netting against reverse repurchase agreement Exposures where the Collateral is Acceptable is not possible because the Exposure is against the issuer of the Collateral; similarly, Netting against repurchase agreement Exposures is not possible because the Exposure is to the issuer and not to the repurchase agreement Counterparty.

**A4.3.17** The CPW of a transaction under which an Authorised Firm sells an asset with recourse, with the result that the Credit Risk remains with the Authorised Firm, must be determined by reference to the asset and not to the Counterparty to the sale.

**A4.4 The maturity of a commitment**

**A4.4.1** For the purposes of section A4.3, the Original Maturity of a commitment, including forward commitments, must be measured from the earlier of:

- (a) thirty days or, in the case of syndicated facilities, sixty days following the date of the firm offer; and
- (b) the date at which the facility becomes available to be drawn down until the facility expires.

**Guidance**

The window provided above gives a reasonable period after the date of the Authorised Firm's offer to allow the practicalities of arranging a facility such as finalising documentation to be completed.

**A4.4.2** A commitment must be excluded from the CRCOM calculation following its expiry date when the facility is no longer available to be drawn down.

**Guidance**

Even if the formal facility agreement provides for an Original Maturity of a set period of time, an Authorised Firm should satisfy itself that it has not assumed an additional legal or moral obligation to maintain the facility for longer than that period. If the Authorised Firm has assumed an additional legal or moral obligation, the Authorised Firm should regard the commitment as having an Original Maturity in excess of the specified period of time, and in such cases CRCOM should be calculated. This line of reasoning also applies to facilities which the customer reasonably expects to be extended automatically.

**A4.4.3** For the purposes of section A4.4, an offer is:

- (a) a legally binding offer that gives rise to a binding contract if it is accepted; or
- (b) a non-legally binding offer except one that is expressly made on terms that:

- (i) it is subject to credit assessment; or
- (ii) there are express circumstances under which it may be withdrawn.

**Guidance**

1. Examples of such circumstances include an Authorised Firm reserving the right to withdraw at its discretion an offer where it is subject to documentation or force majeure and material adverse change clauses.
2. It follows from the above that the date of an offer is often before the date of signature of an agreement to provide a facility.

**A4.4.4** Where the terms of a commitment have been renegotiated or the maturity of a commitment has been extended, or both, an Authorised Firm must measure the Original Maturity from the start of the initial commitment until the expiry date of the renegotiated or extended facility. The only exception is where the renegotiation or extension involves a full credit assessment of the customer and the Authorised Firm has the unconditional right, without notice, to withdraw the existing commitment at the time when the renegotiation or extension is requested. In that case, an Authorised Firm must treat the extended or renegotiated facility as a new commitment.

**A4.4.5** Where an Authorised Firm enters into two or more commitments, which are arranged simultaneously for the same or connected customers, the Authorised Firm must view them as linked. An Authorised Firm must aggregate the commitments and treat their maturity as that of the longest of the individual commitment.

**A4.4.6** Where an Authorised Firm enters into linked commitments that begin or mature at different dates, it must measure the maturity of the combined commitment from the start of the first commitment to the expiry date of the last commitment.

**A4.4.7** Where a commitment provides for a customer to have a facility limit, which varies during the commitment period, an Authorised Firm must take the amount of the commitment as the maximum amount which can be outstanding during the commitment.

**A4.5 Unsettled transactions, free deliveries and OTC derivatives****Guidance**

1. The section applies to both Trading Book and Non-Trading Book transactions.
2. Where settlement does not occur on the due date and neither party has released the relevant cash or Securities, an Authorised Firm faces Market Risk, namely the differential between the contract price of the Securities and their current value in the market. In this case an Authorised Firm faces a CPCOM or CRCOM charge for the unsettled transaction.
3. An Authorised Firm is at risk for the whole amount of the contract (as well as any further movement in price) if it has delivered its leg of a contract before receipt of the other leg. In this case an Authorised Firm faces a CPCOM or CRCOM charge for the free delivery transaction.

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4. For OTC derivatives and other contracts, an Authorised Firm is exposed to settlement risk. For an OTC derivative contract, the risk is that the price moves in an Authorised Firm's favour so that it makes a book profit but at maturity the Authorised Firm cannot realise that profit because the other party defaults. The amount at risk is therefore less than the Authorised Firm's nominal Exposure and is measured by calculating the proportion of the nominal Exposure considered to be at risk - the Credit Equivalent Amount.

**A4.5.1** CPWs must be calculated on the Counterparty to the transaction, not on the issuer of the Security.

**A4.5.2** When calculating its total CPCOM or CRCOM, an Authorised Firm must not include CPCOM or CRCOM on a transaction if it is a negative amount.

**A4.5.3** CPW is applied in accordance with section A4.3 except that the maximum CPW for an OTC derivative is 50%.

**Unsettled delivery versus payment transactions**

**A4.5.4** The CPCOM or CRCOM for transactions on a delivery versus payments basis where the transaction remains unsettled after the due date is given by the formula:

CPCOM or CRCOM on unsettled transactions = CPX x the appropriate percentage from the second column in the table below:

Number of business days after due settlement date	Percentages used for calculation of CPCOM or CRCOM on unsettled transactions
5-15	8%
16-30	50%
31-45	75%
46 or more	100%

**A4.5.5** If Securities are to be received by the Authorised Firm and the transaction remains unsettled:  $CPX = MV - CV$ .

**A4.5.6** If Securities are to be delivered by the Authorised Firm and the transaction remains unsettled:  $CPX = CV - MV$ .

**A4.5.7** If the values for CPX calculated above are negative, CPCOM or CRCOM = 0

**Free delivery transactions**

**A4.5.8** The CPCOM or CRCOM for transactions in which an Authorised Firm has:

- (a) delivered Securities or commodities before receiving payment; or
- (b) paid for Securities or commodities before receiving the items purchased; or
- (c) entered into a foreign exchange contract undertaken in the spot market or contracted for forward settlement and has released funds to its Counterparty but has not yet received the funds in the other currency



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is calculated by the formula: CPCOM or CRCOM on free deliveries = CPX x CPW x the appropriate percentage from the table below:

Number of business days since delivery	Percentages used for calculation of CPCOM or CRCOM on free deliveries
0-15	8%
16-30	50%
31-45	75%
46 or more	100%

**A4.5.9** If an Authorised Firm has delivered commodities or Securities to a Counterparty and has not received payment:  $CPX = CV$  due to the Authorised Firm.

**A4.5.10** If an Authorised Firm has made payment to a Counterparty for commodities or Securities and has not received them:  $CPX = MV$  of the commodities or Securities.

**A4.5.11** If the settlement of the transaction is to be effected across a national border: CPCOM or CRCOM = 0 (provided the gap between the due date for delivery and receipt is no more than one business day; otherwise the formula for free delivery transactions must apply).

**OTC derivatives**

**A4.5.12** (1) For OTC derivative transactions:  $CPCOM$  or  $CRCOM = CEA \times CPW \times 8\%$ .

(2) Contracts traded on exchanges, where they are subject to daily margining requirements, are excluded.

**A4.5.13**  $CEA = MV$  of the OTC derivative contract (if positive, otherwise zero) + PFCE.

**Guidance**

Details of how to net the PFCE are given in section A4.9.1.

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**A4.5.14** PFCE is calculated by multiplying the NP of the contract by the appropriate percentage from the table below.

Type of contract		Residual Maturity of contract		
		<1 Year	1-5 Years	>5 Years
Single currency interest rate basis swaps		0.0%	0.0%	0.0%
Interest rate	Single currency interest rate swaps other than basis swaps Multiple currency basis swaps Forward-rate agreements Interest rate futures Interest rate options purchased Derivatives referenced on an Investment Grade Debt Item Other contracts of a similar nature to those in this box.	0.0%	0.5%	1.5%
Foreign exchange (including gold) except as referred to in A4.5.15	Cross-currency interest-rate swaps. Forward foreign exchange contracts. Currency futures. Currency options purchased. Other contracts of a similar nature to those in this box, including gold.	1.0%	5.0%	7.5%
Equities	Cash settled forward contracts Contracts of a nature similar to those in the interest rate and foreign exchange boxes. Derivatives referenced on a bond which is not an Investment Grade Debt Item.	6.0%	8.0%	10.0%
Precious metals (except gold)	Contracts of a nature similar to those in the interest rate and foreign exchange boxes concerning precious metals, except gold.	7.0%	7.0%	8.0%
Commodities (except precious metals) and any other contracts	Contracts of a nature similar to those in the interest rate or foreign exchange boxes concerning commodities other than precious metals.	10.0%	12.0%	15.0%

**A4.5.15** If the contract is an OTC foreign exchange contract (not including gold) with an Original Maturity of 14 days or less: CEA = 0.

**A4.5.16** Where a contract price is based upon more than one underlying Instrument, the higher of the relevant PFCE multipliers must be used.

**Guidance**

Authorised Firms should refer to section A4.9 for Rules in respect of calculating a net PFCE on OTC derivative contracts.

## **A4.6 Repurchase agreements, reverse repurchase agreements, similar transactions and other deferred settlements**

- A4.6.1** This section applies to transactions in the Trading Book in relation to repurchase agreements, reverse repurchase agreements, similar transactions and deferred settlements.
- A4.6.2** For repurchase agreements and reverse repurchase agreements the formula for CPCOM, which must be calculated from T, is as follows:  $CPCOM = CPX \times CPW \times 8\%$ .
- A4.6.3** For repurchase agreements:  $CPX = MV \text{ of the Securities sold} - \text{value of the Collateral or cash received}$ .
- A4.6.4** For reverse repurchase agreements:  $CPX = \text{Amount paid or Collateral given} - MV \text{ of the Securities received}$ .
- A4.6.5** If the CPX calculated is negative:  $CPCOM = 0$ .
- A4.6.6** The MV of Securities and the value of cash lodged must include accrued interest.
- A4.6.7** For deferred settlement purchases and sales transactions over the spot period:  $CPCOM = 0$ .
- A4.6.8** The 'spot period' means the shortest time between T and:
- (a) the contractual settlement date;
  - (b) the normal local market settlement date; and
  - (c) T + twenty business days.
- A4.6.9** For deferred settlement purchases and sales transactions with a contractual settlement date after the spot period as set out above but less than T + thirty business days:  $CPCOM = CPX \times CPW \times 8\%$ .
- A4.6.10** For deferred settlement purchases and sales transactions with a contractual settlement date exceeding T + thirty business days:  $CPCOM$  for deferred settlement transactions =  $CPX \times CPW \times$  the appropriate percentage from the table below:

Number of business days calculated from T	Percentages used for calculation of CPCOM on deferred settlement transactions where the contractual settlement date exceeds T + 30 business days
0-15	8%
16-30	50%
31-45	75%
46 or more	100%

**Guidance**

CPCOM for deferred settlement transactions applies even if the deferred settlement contract is not overdue.

**A4.7 Other trading book transactions**

**A4.7.1** For Counterparty Exposures in the Trading Book not covered by sections A4.5 and A4.6, the following formula applies:  $CPCOM = CPX \times CPW \times 8\%$ .

**Guidance**

Examples include Counterparty Exposures in relation to exchange-traded derivatives, unpaid margin requirements, Trading Book qualifying deposits, and fees and interest.

**A4.7.2** Where a Counterparty has not fully paid a margin requirement on a derivative transaction listed on an exchange or cleared through a clearing house:  $CPX =$  the shortfall.

**A4.7.3** Where an Authorised Firm sells or writes an option to a Counterparty or buys an option on behalf of a Counterparty and the Counterparty has not paid the full option premium:  $CPX =$  the uncovered premium on the transaction.

**A4.7.4** Where a Counterparty has not fully met amounts owed to an Authorised Firm arising out of losses on closed-out derivative transactions or has not fully settled amounts owed in respect of periodic or final settlement of transactions:  $CPX =$  the unpaid loss.

**A4.8 Concentration risk****Fully-exempt exposures**

**A4.8.1** An Authorised Firm may treat the following Exposures as exempt from the Concentration Risk limits in chapter 4 if they are to Counterparties not connected to the Authorised Firm:

- (a) Exposures to Zone 1 central governments and central banks;
- (b) Exposures to Zone 2 central governments and central banks denominated in the national currency of the Counterparty and which:
  - (i) the Authorised Firm funds in the same currency; or
  - (ii) are Trading Book items;
- (c) Exposures collateralised by Securities issued by Zone 1 central governments or central banks provided that the enforceability requirements in Rule 4.6.5 are met;

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- (d) Exposures for which the Authorised Firm has Collateral in the form of cash or certificates of deposit, including certificates of deposit issued by the Authorised Firm, held by the Authorised Firm, or held by the Authorised Firm's parent Regulated Financial Institution or a Subsidiary of the Authorised Firm, but only if:
  - (i) the Authorised Firm and its parent Regulated Financial Institution or the Subsidiary of the Authorised Firm concerned are subject to consolidated supervision; and
  - (ii) the enforceability requirements in Rule 4.6.5 are met;
- (e) Exposures with a maturity of one year or less, to a:
  - (i) Deposit-taker or principal dealer;
  - (ii) Zone 1 clearing house or exchange; or
  - (iii) Multinational Development Bank;and where such an exposure does not form part of the Capital Resources of the entities referred to in (i) (ii) or (iii) to which the exposure is attributable.
- (f) Exposures collateralised by other Securities, issued by a commercial entity incorporated in a Zone 1 country or a Zone 1 regional government or Local Authority, or Multinational Development Bank, provided that all of the following conditions are met:
  - (i) the Securities are not issued by the Authorised Firm itself or a member of its group;
  - (ii) the Securities are not issued by the Counterparty to which the Exposure arises;
  - (iii) the Securities are readily realisable;
  - (iv) the marked-to-market value of the Securities is at least 200% of the value of the Exposure secured except that:
    - (A) the marked-to-market value of the Securities must be at least 250% of the value of the Exposure secured where the Securities are shares issued by a commercial entity incorporated in a Zone 1 country; and
    - (B) the marked-to-market value of the Securities must be at least 150% of the value of the Exposure secured where the Securities are debt Securities issued by a Zone 1 deposit-taker, which do not constitute its own capital resources; or debt Securities issued by a Multilateral Development Bank or a Zone 1 regional government or Local Authority; and
  - (v) the enforceability requirements in Rule 4.6.5 are met;

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- (g) Material Holdings in Regulated Financial Institutions and other Exposures which have been deducted from an Authorised Firm's Capital Resources as required in chapter 2; and
- (h) Debtors and accruals in respect of performance fees in relation to a Category 3 Authorised Firm where such income does not form part of an Authorised Firm's reserves for capital adequacy purposes.

**Guidance**

A Category 3 Authorised Firm may seek a waiver from the DFSA in relation to the Concentration Risk limits in chapter 4 where the Authorised Firm has significant fees receivable or accrued.

**Partially exempt exposures**

- A4.8.2** If an Exposure is partially secured by Collateral that meets the requirements of Rule A4.8.1(f) only that part of the Exposure which is secured by Collateral is exempt from the Concentration Risk limits in chapter 4.
- A4.8.3** If an Exposure is partially guaranteed by an Authorised Firm's parent Regulated Financial Institution only that part of the Exposure subject to the guarantee is exempt from the Concentration Risk limits in chapter 4.
- A4.8.4** For the purposes of calculating an Exposure against the Concentration Risk limits, an Authorised Firm may choose to reduce the following Exposures to the stated percentage of their value in accordance with the table below.

Types of Exposure	Percentage
Exposures to a Zone 1 regional government or Local Authority or Exposures guaranteed by such a government or Local Authority.	20%
Exposures arising from a derivative contract to a deposit-taker or principal dealer from a Zone 1 country with a maturity of over one year and not more than three years.	20%
Exposures to Readily Realisable Securities with a maturity of over one year but no more than three years issued by deposit-taker or principal dealer from a Zone 1 country, provided that these Securities are held in the Authorised Firm's Trading Book and are not issued by a Counterparty or Counterparties connected to the Authorised Firm.	50%

**Exposures to undisclosed counterparties**

- A4.8.5** An Authorised Firm must not incur an Exposure to an undisclosed Counterparty.

**A4.8.6 Identification of counterparties**

**Guidance**

1. An individual Counterparty is a natural or legal person, which include governments, Local Authorities, Public Sector Entities, trusts, corporations, unincorporated businesses and non-profit-making bodies.

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2. Examples of a Counterparty include:
- a. the customer or borrower;
  - b. where the Authorised Firm is providing a guarantee, the person guaranteed;
  - c. for a derivatives contract, the person with whom the contract was made;
  - d. for most exchange-traded contracts involving a central clearing mechanism, that central clearing mechanism; and
  - e. where a bill held by an Authorised Firm has been accepted by another Authorised Firm, the acceptor.

**Group of closely related counterparties**

**A4.8.7** A single group of Closely Related Counterparties means, in relation to an Authorised Firm, all the persons to which the Authorised Firm has an Exposure and which are Closely Related to each other.

**A4.8.8** Persons are Closely Related if:

- (a) the insolvency or default of one of them is likely to be associated with the insolvency or default of the others;
- (b) it would be prudent when assessing the financial condition or creditworthiness of one to consider that of the others; or
- (c) there is, or is likely to be, a close relationship between the financial performance of those persons.

**A4.8.9** An Authorised Firm must treat two or more persons as falling within a group of Closely Related Counterparties if the Authorised Firm has Exposures to them all and any loss to the Authorised Firm on any of the Exposures to one is likely to be associated with a loss to the Authorised Firm with respect to at least one Exposure to each of the others.

**A4.8.10** Persons who are Closely Related to each other are also connected with each other.

**Connected counterparties**

**A4.8.11** For Concentration Risk purposes, and in relation to a person, a Connected Counterparty means another person to whom the first person has an Exposure and who fulfils one of the following conditions:

- (a) he is connected to the first person; or
- (b) he is an Associate of the first person; or
- (c) the same persons significantly influence the Governing Body of each of them; or
- (d) one of those persons has an Exposure to the other that was not incurred for the clear commercial advantage of both of them and which is not on arm's length terms.

**Connected counterparty exemptions**

**A4.8.12** An Authorised Firm may treat as exempt from the Concentration Risk limits in chapter 4 an Exposure to a Counterparty or Counterparties connected to the Authorised Firm if all of the following conditions are met:

- (a) the Authorised Firm has given the DFSA written notice one month in advance of its intention to use the exemption and explained how it will ensure that it will still meet the Concentration Risk limits on a continuing basis when using the exemption;
- (b) the total amount of the Exposures that an Authorised Firm is treating as exempt under this rule does not exceed 50% of the Authorised Firm's Capital Resources;
- (c) the Authorised Firm makes and retains a record that identifies each Exposure it has treated in this way;
- (d) the Authorised Firm is subject to consolidated supervision;
- (e) the Counterparty is:
  - (i) an Authorised Firm which is the subject of consolidated supervision;
  - (ii) a member of the Authorised Firm's Group which is the subject of consolidated supervision; or
  - (iii) a member of a Group that the DFSA has confirmed in writing is the subject of Group prudential supervision by an appropriate regulator.
- (f) the Exposure satisfies one or more of conditions (a) to (c) below:
  - (i) it is a loan made by the Authorised Firm with a maturity of one year or less in the course of the Authorised Firm carrying on a treasury role for other members of its Group;
  - (ii) it is a loan to the parent of the Authorised Firm made in the course of a business carried on by the Authorised Firm of lending to its parent cash that is surplus to the needs of the Authorised Firm, provided that the amount of that surplus fluctuates regularly; and
  - (iii) it arises from the Authorised Firm or a Counterparty connected to the Authorised Firm operating a central risk management function for Exposures arising from derivatives contracts.

**Measuring exposure to counterparties and issuers**

**A4.8.13** Rules A4.8.14 to A4.8.22 apply to both Non-Trading Book and Trading Book Exposures.

**A4.8.14** When calculating an Exposure, an Authorised Firm must include accrued interest and dividends due.



- A4.8.15** An Authorised Firm must not offset Non-Trading Book and Trading Book Exposures.
- A4.8.16** A net short position is not an Exposure for the purposes of Concentration Risk.
- A4.8.17** The value of an Authorised Firm's Exposure to a Counterparty, whether in its Non-Trading Book or its Trading Book, is the amount at risk calculated in accordance with chapter 4.

#### **Exposures to issuers**

- A4.8.18** An Authorised Firm must calculate the value of an Exposure to the issuer of a Security, which is held in the Authorised Firm's Non-Trading Book as the sum of the excess, where positive, of the book value of all long positions over all short positions (the net long position), for each identical instrument issued by that issuer.
- A4.8.19** For the purposes of Rule A4.8.18, short positions in one Security may be used to offset long positions in a non-identical Security issued by the same issuer if:
- (a) both Securities are denominated in the same currency; and
  - (b) where both Securities are fixed rate or index-linked, they are within the same Residual Maturity time band; or
  - (c) both Securities are floating rate.
- A4.8.20** An Authorised Firm must calculate the value of an Exposure to the issuer of a Security that is held in the Authorised Firm's Trading Book by calculating the excess of the current market value of all long positions over all short positions in all the Securities issued by that issuer.
- A4.8.21** An Authorised Firm must not offset an Exposure to one issuer against an Exposure to another even where the issuers are in a Group of Closely Related Counterparties.
- A4.8.22** An Authorised Firm must include as a long position a commitment by it to buy:
- (a) a debt Security or an equity at a future date; and
  - (b) under a note issuance facility, at the request of the issuer, a Security that is unsold on the issue date.
- A4.8.23** An Authorised Firm must include as a short position a commitment by it to sell a debt Security or equity at a future date.
- A4.8.24** Where the equity leg of an equity swap is based on the change in value of an individual equity, it is treated as an Exposure to the issuer of the equity.

#### **Guidance**

An interest rate leg of an equity swap, or interest rate or currency swap does not generate an Exposure to an issuer.

**A4.8.25** When determining its Exposure to an issuer arising from an option, an Authorised Firm must value the notional principal of an option as the amount of principal underlying the option.

**A4.8.26** An Authorised Firm must treat:

- (a) a written put option as a long position in the underlying Instrument valued at the strike price;
- (b) a written call option as a short position in the underlying Instrument valued at the strike price;
- (c) a purchased put option as a short position in the underlying Instrument valued at the strike price; and
- (d) a purchased call option as a long position in the underlying Instrument equal to the book value of the option.

**A4.8.27** An Authorised Firm must, for the purposes of Concentration Risk, treat an Exposure to an issuer arising from an index or basket of debt Securities or a non-broad-based equity index or basket, as a series of Exposures to the issuers of the underlying Instruments or equities in accordance with the procedures in chapter 4.

**Guidance**

Broadly based equity indices should not be broken down into their constituent stocks. A position related to a broadly based equity index does not generate an Exposure to any issuer.

**A4.8.28** An Authorised Firm which receives cash on a repurchase agreement must treat the cash as if it is on its balance sheet and in accordance with sections 4.3 and 4.5. Any collateral received against repurchase agreements or securities and commodities borrowing must also be treated as a balance sheet item under sections 4.3 and 4.5.

**A4.8.29** An Authorised Firm must treat a reverse repurchase agreement or securities and commodities lending in its Non-Trading Book as a collateralised loan and the Collateral it holds as an asset, provided that the Collateral is Acceptable Collateral. If the Collateral is not Acceptable Collateral, the Authorised Firm must treat the transaction as an unsecured loan to the Counterparty.

**A4.8.30** An Authorised Firm with repurchase agreements and reverse repurchase agreements in its Trading Book has an Exposure to:

- (a) the issuer of the Security it has sold in a repurchase agreement; and
- (b) the Counterparty where the Securities or cash given by the Authorised Firm exceed the Securities or cash it receives (i.e. there is a net margin given by the Authorised Firm) in a repurchase agreement or reverse repurchase agreement.

**A4.8.31** An Authorised Firm must calculate in accordance with section 5.8 an Exposure to the issuer arising from the underwriting or sub-underwriting of a new issue of Securities.

**Collateral**

**A4.8.32** The table below provides a list of Acceptable Collateral for the purposes of calculating CRCOM and CPCOM together with the amount of the applicable CPW.

Risk Weighting of Collateralised Exposure where equal to or lower than that of the underlying exposure.		
Acceptable Collateral	Category 1 & 5	Category 2 & 3
Cash on deposit with the Authorised Firm or a Regulated Financial Institution in the same Group.	0%	0%
Cash held with Zone 1 deposit takers outside an Authorised Firms Group.	20%	0%
Gold Coinage and Bullion (including Tola Bars).	0%	0%
Silver Coinage and Bullion.		0%
Certificates of deposit issued by and lodged with the Authorised Firm.	0%	0%
Securities issued by Zone 1 central government, Zone 1 central bank where securities are marked to market daily.	0%	0%

Risk Weighting of Collateralised Exposure where equal to or lower than that of the underlying exposure.		
Acceptable Collateral	Category 1 & 5	Category 2 & 3
Securities issued by Zone 1 central government, Zone 1 central bank that have a residual maturity of 1 year or less where securities are not marked to market daily.	10%	0%
Securities issued by Zone 1 central government, Zone 1 central bank that have a residual maturity of over 1 year where securities are not marked to market daily.	20%	0%
Securities issued by Multilateral development banks.	20%	0%
Letter of credit issued by a Regulated Financial Institution.		0%
Standby letter of credit issued by a Zone 1 Deposit Taker.		0%
Unconditional, irrevocable on demand letter of credit issued by a Zone 1 deposit taker.		0%
Commodities.		0%
Marketable Assets.		0%

## **A4.9 Netting**

### **Potential future credit exposure**

#### **Guidance**

An Authorised Firm may calculate the Potential Future Credit Exposure (PFCE) arising under OTC derivative contracts on a net basis. Details of the PFCE calculations are set out in section A4.5 above.

**A4.9.1** Where the conditions in chapter 4 are met, the Authorised Firm may calculate its net PFCE on OTC derivative contracts using the following formula:  $PFCE_{reduced} = 0.4 \times PFCE_{gross} + 0.6 \times NGR \times PFCE_{gross}$  where:

- (a) PFCE reduced is the reduced figure for PFCE for all contracts with a given Counterparty included in the Netting agreement;
- (b) PFCE gross is the sum of the figures for PFCE for all contracts with a given Counterparty which are included in the Netting agreement; and
- (c) NGR (the net-to-gross ratio) is the quotient of the net replacement cost for all contracts included in the Netting agreement with a given Counterparty (numerator) and the gross replacement cost for all contracts included in the Netting agreement with that Counterparty (denominator).

**A4.9.2** For the purposes of Rule A4.5.13, the maturity date should be the maturity of the longest date.

## **A4.10 Securitisation**

#### **Guidance**

This section sets out detailed Rules and Guidance on Securitisation and Credit Risk transfers, which cover the specific circumstances of undrawn commitments to lend, transfers of financed equipment and consumer goods, Revolving Securitisations, transfers to special purpose vehicles (SPV), repurchasing, Credit Enhancement, Liquidity support and underwriting and dealing.

**A4.10.1** The following definitions are used in section A4.10:

Credit Enhancement	Credit Enhancement is a facility provided to the buyer of risk that covers losses and risks associated with the pool of items in the Securitisation or Credit Risk transfer.
Originator	An Authorised Firm acts as an Originator when it contributes the items in the Securitisation or Credit Risk transfer.
Revolving Securitisation	A traditional or synthetic Securitisation in which the specified items consist of revolving assets such as loan facilities or credit card balances which permit borrowers to vary the drawn amount within an agreed limit, or the scheme itself is revolving.
First Loss Facility	A First Loss Facility represents the first level of support provided to the SPV that should bear all, or a significant part of, the risk associated with the items held by the SPV.
Securitisation	Securitisation is the financing or refinancing of assets, such as mortgages, credit card debt, or other assets (including accounts receivable), which are legally transferred to a scheme, by packaging them into a tradable form through the issue of Securities which are secured on the assets and serviced from the cashflows which they yield.
Servicer	A servicer is a Person that administers the securitised items.
Sponsor	An Authorised Firm acts as sponsor when it repackages third party assets directly into a scheme. Where an Authorised Firm repackages non-Investment Grade third party assets, it may fall within the definition of an Originator unless it originates or repackages no more than 10% of the scheme's total assets.

**Undrawn commitments to lend**
**A4.10.2** An Authorised Firm must include an undrawn commitment to lend (or part of an undrawn commitment to lend) that has been transferred by Securitisation or Credit Risk transfer in its calculation of the Capital Resources requirement, unless the transfer has been effected by:

- (a) novation; or
- (b) an assignment accompanied by:
  - (i) a release and formal acknowledgement by the borrower of the transfer of the seller's obligations to the buyer; and
  - (ii) a formal acknowledgement from the buyer of its assumption of the seller's obligations.

**Guidance**

The buyer's assumption of a commitment (or part of a commitment) is included in its capital ratio as a claim on the borrower irrespective of the method of transfer.

**Transfers of financed equipment and consumer goods**

**A4.10.3** An Authorised Firm must include the receivables that arise from financed equipment or consumer goods which have been transferred by Securitisation or Credit Risk transfer, in the calculation of its Capital Resources requirement, unless the Authorised Firm has protected itself against potential liabilities that may arise from the financed equipment or consumer goods.

**Guidance**

An Authorised Firm should either obtain an indemnity from the buyer or take out insurance to cover:

- a. Continuing liabilities regarding the merchantability of goods and equipment;
- b. Liability for personal injury or death arising from defective goods; and
- c. Other contractual obligations towards the borrower.

**Revolving securitisations**

**A4.10.4** Where an Authorised Firm structures a Revolving Securitisation it must:

- (a) incorporate a scheduled amortisation as set out below; and
- (b) ensure there is a pro rata sharing between all the holders of interests in the pool of items of the interest, principal, expenses, losses and recoveries on a clear and consistent basis during the revolving period and amortisation period.

**Guidance**

Revolving Securitisations determine a period - known as the revolving period - when principal repayments may be reinvested in new assets, and a period - known as the amortisation period - when principal is repaid according to a defined amortisation schedule.

**Scheduled amortisation**

**A4.10.5** An Authorised Firm must include the items that have been transferred by Securitisation or Credit Risk transfer in its calculation of the Capital Resources requirement, unless the amortisation period is long enough to ensure that in aggregate at least 90% of the total debt outstanding at the beginning of the amortisation period will be repaid or recognised as in default by the end of the scheduled amortisation period.

**Guidance**

The pace of repayment during any scheduled amortisation period should not be more rapid than would be allowed by a straight-line amortisation over the period.

**Early amortisation**

**A4.10.6** Early amortisation of the Securities describes the process whereby the repayment of the investors' interest is brought forward upon the occurrence of specified events. Events that are economic in nature by reference to the financial performance of the transferred assets are known as economic triggers.

**A4.10.7** An Authorised Firm structuring a Revolving Securitisation that includes economic triggers for early amortisation may regard the items as transferred for the period up to the point of repayment, provided that:

- (a) during the amortisation period there is full sharing of interest, principal, expenses, losses and recoveries; and
- (b) the Authorised Firm's risk management system provides warning indicators when economic or non-economic triggers may be activated.

**A4.10.8** Non-economic triggers are activated by changes, not related to the performance of the transferred assets, which can cause significant implications for the Securitisation.

**Guidance**

Examples of such triggers include tax events, legal changes resulting in an Authorised Firm's non-performance in its role as a servicing agent, and triggers relating to the insolvency of the Originator.

**A4.10.9** An Authorised Firm must plan how it will deal with the need for increased capital and liquidity when an amortisation trigger is activated.

**Replenishing assets**

**A4.10.10** Where an Originator structures a Securitisation which allows items to be substituted or replaced, it must include any item that is transferred by Securitisation or Credit Risk transfer in its calculation of Capital Requirement unless:

- (a) the credit quality of the new items is substantially the same as those already in the securitised portfolio; and
- (b) the substitution or replacement does not improve the aggregate credit quality of the existing portfolio or the scheme.

**Guidance**

1. Credit quality refers to the likelihood of credit losses being incurred by the Authorised Firm in relation to an item.
2. The assessment of credit quality of the new items should also take into account the credit quality of the existing portfolio, for example, with regard to:
  - a. the Authorised Firm's internal credit grading of the item;
  - b. the maturity of the item and the portfolio;
  - c. the loan to value ratio of the item and the ratio within the portfolio; and
  - d. the size of the item.
3. An Authorised Firm should ensure that the accounts transferred into the pool are likely to display the characteristics of fully operational accounts. Together with an asset replenishing approach ensuring the random selection of the items, this should normally make sure that investors are not systematically disadvantaged.



**A4.10.11** Where an Originator structures a Securitisation which allows items to be substituted or replaced as a result of borrowers switching products of the Originator, the Authorised Firm must include an item that has been transferred by Securitisation or Credit Risk transfer in the calculation of its Capital Requirement unless:

- (a) the product switch was requested by the borrower; and
- (b) the substitution or replacement accords with the above requirements for assets replenishment.

#### **Transfers to special purpose vehicles**

**A4.10.12** An Authorised Firm need not include in its calculation of Capital Resources or Capital Requirement assets transferred to:

- (a) a Special Purpose Vehicle (SPV); or
- (b) any person, if the transfer is in connection with a Securitisation under which the issuer of the Securities is an SPV;

provided that:

- (i) the Authorised Firm does not own any share or proprietary interest in the SPV;
- (ii) no more than one member of the board or other Governing Body of the SPV is an officer, partner, or employee of the Authorised Firm;
- (iii) the SPV does not have a name that implies any connection with the Authorised Firm or any other member of the Authorised Firm's Group;
- (iv) the Authorised Firm does not fund the SPV except where permitted under the requirements for Credit Enhancement below;
- (v) the Authorised Firm does not provide temporary finance to the SPV to cover cash shortfalls arising from delayed payments or non-performance of loans transferred except where it meets the requirements for Liquidity support below;
- (vi) the Authorised Firm does not bear any of the recurring expenses of the SPV; and
- (vii) any agreements between the Authorised Firm and the SPV are at market rates and at arm's length.

#### **Repurchasing**

**A4.10.13** An Authorised Firm acting as Originator must not repurchase any item:

- (a) of which it was an Originator under a Securitisation; and

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- (b) which the Authorised Firm has treated as having been transferred in the calculation of its Capital Resources or Capital Requirement
  - unless
    - (i) the prospectus or other selling documentation for that Securitisation makes a clear and unequivocal statement to the effect that the Authorised Firm is under no obligation to repurchase any item subject to the Securitisation; and
    - (ii) the conditions in Rule A4.10.14 for the repurchase of an item are satisfied.

**A4.10.14** For the purposes of Rule A4.10.13(b)(ii), an Authorised Firm may repurchase an item where the repurchase (or purchase) is subject to the Authorised Firm's normal credit approval and review processes and:

- (a) the repurchase arises from a product switch as set out above;
- (b) the Authorised Firm is obliged to make that repurchase under the terms of a warranty; or
- (c) the value of the items subject to the Securitisation immediately before the repurchase is no more than 10% of the highest amount which the value of items subject to that Securitisation has reached since the start of that Securitisation and the obligations making up that item are not default or if the item is in default, the repurchase is for a nominal consideration.

**A4.10.15** An Authorised Firm acting as Sponsor must include any items that have been purchased or repurchased from a Securitisation in the calculation of its Capital Resources Requirement, unless the purchase meets the following conditions:

- (a) the purchase does not constitute Credit Enhancement;
- (b) the purchase is subject to an assessment by the Authorised Firm's risk management systems; and
- (c) either:
  - (i) the items are financial instruments and are Investment Grade; or
  - (ii) the items are non-financial instruments and are not in default or, where they are recognised as in default, are repurchased for a nominal consideration.

**Credit enhancement**

**A4.10.16** An Authorised Firm must deduct from its Capital Resources the total amount of Credit Enhancement it provides to a transaction, from the outset of the scheme until the scheme is fully repaid or wound up, unless all of the following conditions are met:

- (a) the Credit Enhancement is not a First Loss Facility;

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- (b) there is significant first loss Credit Enhancement provided by a third party;
- (c) the Credit Enhancement can only be drawn after the first loss Credit Enhancement is exhausted; and
- (d) the Authorised Firm is a Sponsor.

**Guidance**

Where the conditions in Rule A4.10.16 (a)–(d) are met, an Authorised Firm is required to include such Credit Enhancement in its risk weighted assets in accordance with chapter 4.

**A4.10.17** For the purposes of Rule A4.10.16(b) first loss Credit Enhancement will only be considered significant when the second loss facility is Investment Grade.

**Guidance**

An Authorised Firm should assess the adequacy of the First Loss Facility on an arm's length basis in accordance with its normal credit policies and should consider the following:

- a. the class and quality of the items held in the SPV;
- b. the history of default rates on the items;
- c. the output of any statistical models used by the Authorised Firm to assess expected default rates on the items;
- d. the types of activities performed by the SPV;
- e. the quality of the parties providing the First Loss Facility; and
- f. the opinions or rating letters provided by reputable third parties, such as rating agencies, regarding the adequacy of the first loss protection.

**A4.10.18** If another party which provides the first loss protection fails to meet any of its obligations and an Authorised Firm provides the second loss protection, which will substitute for the First Loss Facility, the Authorised Firm providing the second loss facility must treat the facility as a first loss enhancement.

**A4.10.19** An Authorised Firm providing Credit Enhancement must include all the items in a Securitisation in the calculation of its Capital Requirement, except it must:

- (a) include only the amount of the Credit Enhancement in the risk weighted assets in calculating its capital requirements; or
- (b) deduct the amount of the Credit Enhancement from its Capital Resources

where:

- (i) the Credit Enhancement is funded at the inception of the scheme and is repayable only following the wind up of the scheme;
- (ii) the Credit Enhancement is limited in amount and duration, with no recourse to the Authorised Firm beyond the fixed contractual obligations;

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- (iii) the Credit Enhancement is documented separately from other facilities provided by the Authorised Firm;
- (iv) the SPV, note trustee or investors have the right to select an alternative party to provide Credit Enhancement;
- (v) the Authorised Firm's involvement in the scheme is properly explained in the offering document or transfer agreement, or both, and is made unequivocally clear that the Authorised Firm is not responsible for, and will not support losses beyond, the terms of the contract; and
- (vi) payment of any fee or other fee income for the Credit Enhancement is not subordinated or subject to deferral or waiver beyond what is already explicitly provided for in the applicable order of priority and other payment entitlement provisions.

**A4.10.20** An Authorised Firm may increase the level of Credit Enhancement at the same time as further tranches of items are placed into the scheme provided that the additional Credit Enhancement is not used to improve the credit quality of the existing items in the scheme.

**Liquidity support**

**A4.10.21** An Authorised Firm is considered to provide liquidity support to a scheme where it has an agreement to give financial support to the SPV which enables the scheme to assure the investors of timely payments, including:

- (a) the smoothing of timing differences in the payment of interest and principal on the pooled items; or
- (b) ensuring payments to investors in the event of market disruptions.

**A4.10.22** Financial support that covers losses or risks associated with the scheme other than Liquidity Risk is deemed to be Credit Enhancement and not Liquidity support.

**Guidance**

Liquidity support agreements may include revolving loan facilities, account overdrafts, or asset purchase agreements.

**A4.10.23** An Originator providing a Liquidity facility to an SPV where the Liquidity agreement covers its transferred items must treat those items as being on its balance sheet.

**A4.10.24** A Sponsor must comply with the requirements for Originators to the extent that an SPV holds items it has originated.

**A4.10.25** A Sponsor providing a liquidity facility to a scheme must treat the facility as a Credit Enhancement in the calculation of its Capital Resources and Capital Requirement unless the following conditions are met:

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- (a) the facility is given on market terms and is subject to an assessment by the Authorised Firm's risk management systems;
- (b) the SPV or the investors, or both, have the right to select an alternative party to provide the facility;
- (c) the facility is separately documented and clearly defines the circumstances under which the facility may be drawn;
- (d) there is no possibility of recourse to the Authorised Firm beyond the fixed contractual obligations in the agreement;
- (e) the facility is limited in amount and duration;
- (f) the facility may not be drawn for the purpose of providing credit support;
- (g) the facility may not be drawn if the extent of liabilities retained by the SPV are below Investment Grade;
- (h) proceeds of drawings cannot be used to cover losses of the SPV;
- (i) proceeds of drawings under the facility are provided to the SPV and not directly to investors;
- (j) proceeds of drawings cannot be used to provide permanent revolving funding;
- (k) the facility reduces as the items in the SPV deteriorate in quality to the extent that there is no longer a sufficient level of Investment Grade items or Credit Enhancement, or both, to cover the amount of new and existing drawdowns under the facility;
- (l) repayment of the facility may not be subordinated to the interests of investors; and
- (m) payment of any fee or other income for the facility is not further subordinated, or subject to deferral or waiver, beyond what is already explicitly provided for in the applicable order of priority and other payment entitlement provisions.

**Guidance**

It is permissible for a Liquidity facility to be structured as an arrangement in which underlying items held by the SPV are purchased by the Liquidity provider, provided that the items in question are externally rated Investment Grade.

**Underwriting**

- A4.10.26** Where an Originator acts as underwriter for the Securities issued, the underlying items will not be regarded as being transferred until 90% of the total issuance has been sold to third parties.

### **Dealing**

- A4.10.27** An Originator dealing in Investment Grade Securities issued by an SPV must deduct any holdings in the Investment Grade Securities from its Capital Resources unless the holding is subject to:
- (a) an ongoing limit of 3% of the Securities issued; and
  - (b) a limit of 10% of the Securities issued for a period of five business days:
    - (i) immediately following close of the transaction; or
    - (ii) in the case of revolving securitisations only, at the beginning of the scheduled amortisation period.
- A4.10.28** An Originator holding in excess of the dealing limits in Rule A4.10.27 must either:
- (a) where the holding is less than 10%, deduct from its Capital Resources the excess over the dealing limit; or
  - (b) where the holding is greater than 10%, regard the transferred risks associated with the items as being back on its balance sheet.
- A4.10.29** An Originator must not deal in the Securities during the amortisation period.
- A4.10.30** A Sponsor dealing in the Securities issued by the SPV must include these Securities in the calculation of its Capital Requirement.

### **Synthetic securitisations**

#### **Guidance**

Synthetic Securitisations differ from the traditional Securitisations discussed in this section in that they use Credit Derivatives to transfer the Credit Risk associated with the underlying pool of assets to a SPV. The SPV, in turn, issues notes, thus passing the Credit Risk to third party investors. As the underlying assets are not legally transferred to the SPV as in a traditional Securitisation – although the Originators continue to benefit from a similar degree of credit protection – the resulting structure is said to be ‘synthetic’. Effective transfer of Credit Risk is still required to be demonstrated. Therefore, an Authorised Firm entering into Synthetic Securitisations should comply with the relevant provisions in IFR chapter 5 and this appendix in relation to traditional Securitisations and Credit Derivatives.

- A4.10.31** An Authorised Firm involved in Synthetic Securitisations must seek individual guidance on a case-by-case basis from the DFSA regarding the regulatory treatment of such transactions.

### **A4.11 Credit derivatives**

- A4.11.1** An Authorised Firm must ensure that it applies an appropriate Capital Requirement to all its positions in Credit Derivatives.

**Guidance**

1. An Authorised Firm should seek individual guidance from the DFSA on the application of the above rule to a Credit Derivatives transaction, where an Authorised Firm is entering into a transaction which does not have an explicit capital treatment set out in this section.

**Trading book capital treatment**

2. Rules A4.11.2 to A4.11.20 provide requirements in respect of the capital treatment of Trading Book items.

**A4.11.2** An Authorised Firm must calculate the General Market Risk Requirement for its positions in Credit Derivatives in accordance with chapter 5.

**A4.11.3** An Authorised Firm must calculate the Counterparty Risk Capital Component of its Credit Risk Capital Requirement for its positions in Credit Derivatives in accordance with chapter 4.

**A4.11.4** Market Risk positions in Credit Derivatives referenced to a single asset must be recorded in accordance with the table in Rule A4.11.5 for the purpose of calculating Specific Risk and General Market Risk Requirements.

**A4.11.5**

Credit Derivatives type	Position to be recorded
Credit Default Products	Must be represented as a long (if the Authorised Firm has bought Credit Risk) or short (if the Authorised Firm has sold Credit Risk) notional position in the Specific Risk of the Reference Asset.
	A General Market Risk position must be reported if premium or interest payments are due under the product; these cashflows must be represented as a notional position in a government Security with the appropriate fixed or floating rate, otherwise there is no General Market Risk position.
Total Return Swaps	Must be represented as a long or short notional position in the Reference Asset with General Market Risk and Specific Risk of the Reference Asset.
	The interest payments under the swap must be represented as a long or short General Market Risk position in a notional government Security with the appropriate fixed or floating rate.
Credit-linked Notes	Must be represented as a long (for Protection Seller) or short (for Protection Buyer) notional position in the Specific Risk of the Reference Asset.
	The buyer of Credit Risk must also report a long Specific Risk position in the Credit-linked Note.
	A General Market Risk position in the Credit-linked Note must be reported for both the Protection Buyer and Protection Seller.

**A4.11.6** For the purpose of calculating Specific Risk and General Market Risk Requirements, Market Risk positions in Credit Derivatives referenced to countries or entities must be recorded as follows:

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- (a) An Authorised Firm that holds a Credit Derivative as a Protection Buyer referenced to a corporate name or country must report a Specific Risk position in a notional floating rate note issued by the reference obligor with the maturity of the Credit Derivative.
- (b) An Authorised Firm that sells protection through a Credit Derivative referenced to a corporate name or country rather than a particular asset or basket of assets must record a position in the most junior deliverable obligation, or, if there is no deliverable obligation, the Authorised Firm must report a Specific Risk position in a notional floating rate note issued by the reference obligor with the maturity of the Credit Derivative.

**A4.11.7** Specific Risk positions for multiple Reference Assets and basket trades (Credit Default Products and Credit-linked Notes) must be recorded as follows:

- (a) the Protection Buyer of a First to Default product or note must record a short position in one Reference Asset in the basket only. The Protection Buyer may choose which asset in the basket to record as a short position;
- (b) the Protection Seller of a First to Default product or note must record long positions in each of the assets in the basket with the exception noted in Rule A4.11.8. The Protection Seller may keep the total capital charge for the first to default product capped at the equivalent deduction from capital;
- (c) for the Protection Buyer, the size of the positions recorded in Reference Assets must be equal to the values of the Reference Assets;
- (d) for the Protection Seller, the size of the positions recorded in Reference Assets must be equal to the maximum payout of the product or note;
- (e) where the product is a proportionate structure (that is, protection is allocated proportionately between the assets in the basket), both the Protection Buyer and Protection Seller must record Specific Risk positions in the Reference Assets according to their proportions in the contract; and
- (f) the Protection Seller of a funded position must also record a long position in the Specific Risk of the note issuer of a size equal to the amount of funding given.

**A4.11.8** Where a multiple-name Credit-linked Note is Investment Grade, the Protection Seller may record the Specific Risk position in the Reference Assets as a single long position with the Specific Risk of the note issuer.

**Total return swaps**

**A4.11.9** Where a Total Return Swap is referenced to multiple names, and the returns on assets are exchanged according to their proportions in the basket, the Authorised Firm must record long or short positions in all the Reference Assets according to the proportions underlying the swap.

**A4.11.10** Where an Authorised Firm enters into a Credit Derivative offering second loss protection and beyond, it must comply with Rule A4.11.1.



**Guidance**

The table below summarises the General Market Risk and Specific Risk requirements attached to Credit Derivatives.

Product	Protection seller		Protection buyer	
	SPECIFIC RISK	GENERAL MARKET RISK	SPECIFIC RISK	GENERAL MARKET RISK
Credit Default Product	YES In Reference Asset(s)	NO	YES In Reference Asset(s)	NO
Total Return Swap	YES In Reference Asset(s)	YES On the interest rate leg	YES In Reference Asset(s)	YES On the interest rate leg
Credit-linked Note	YES In both the Reference Asset(s) and the issuer	YES According to the coupon on maturity of the note	YES In Reference Asset(s)	YES According to the coupon on maturity of the note

**Specific risk offset**

- A4.11.11** For the purposes of calculating a Specific Risk Capital Requirement, an Authorised Firm may net a notional position in a Reference Asset created by a Credit Derivative with positions in underlying Instruments or other notional positions created by other derivatives, only if the risk transfer requirements in Rules A4.11.42 to A4.11.45 are satisfied.

**Maturity mismatch**

- A4.11.12** (1) Where an Authorised Firm holds a Credit Derivative of shorter maturity than the Reference Asset, it may net, for the purposes of calculating the Specific Risk requirement, a long and a short Specific Risk position. However, a forward position in Specific Risk of the Reference Asset must be recorded.
- (2) The above treatment does not apply to Total Return Swaps, where no forward position in the Specific Risk of the Reference Asset is recorded in cases of a Maturity Mismatch.

**Guidance**

In accordance with Rule A4.11.12(1), the net result of holding the Credit Derivative and the long and short positions is, in effect, a single Specific Risk requirement at the inception of the transaction for the longer maturity position in the Reference Asset.

- A4.11.13** For the purposes of calculating a Specific Risk Capital Requirement, an Authorised Firm may net long and short positions in identical Credit Derivatives referenced to a corporate name or country.
- A4.11.14** If a Credit Derivative is fully hedged with a long or short cash position in the Reference Asset, the Capital Requirements, after offsetting has been recognised, are summarised in the table below:

	CASH POSITION IN REFERENCE ASSET ATTRACTS:		CREDIT DERIVATIVE ATTRACTS:		CAPITAL REQUIREMENT AFTER OFFSETTING:	
CREDIT DEFAULT PRODUCT	SR	in Reference Asset(s)	SR	in Reference Asset(s)	SR	NIL
	GMR	according to coupon & maturity of assets	GMR	NIL	GMR	according to coupon & maturity of assets
TOTAL RETURN SWAP	SR	in Reference Asset(s)	SR	in Reference Asset(s)	SR	NIL
	GMR	according to coupon & maturity of assets	GMR	on interest rate leg	GMR	On cash position and interest-rate leg1
CREDIT-LINKED NOTE (Protection Seller)	SR	in Reference Asset(s)	SR	in Reference Asset(s) and issuer2	SR	in issuer
	GMR	according to coupon & maturity of assets	GMR	in Reference Asset(s)	SR	NIL
CREDIT-LINKED NOTE (Protection Buyer)	SR	in Reference Asset(s)	SR	in Reference Asset(s)	SR	NIL
	GMR	according to coupon & maturity of assets	GMR	according to coupon & maturity of assets	GMR	on Reference Asset(s) and note3
<p>SR=Specific Risk, GMR=General Market Risk            1 Positions will go into the appropriate General Market Risk buckets and offsets will be allowed according to the rules on General Market Risk (see chapter 5).            2 If the note satisfies the criteria for a Investment Grade Item then a single position in the Specific Risk of the issuer is created.            3 This assumes that the coupon due from the Credit-linked Note differs from the coupon received from the Reference Asset.</p>						

**Step-ups and call options**

**A4.11.15** Where a Credit Derivative includes both a step-up that is, an increase in the protection payments and a call option, the maturity of the contract is as follows:

- (a) for the Protection Buyer, the date the call option may be exercised; and
- (b) for the Protection Seller, the contractual maturity.

**Counterparty risk****Guidance**

The detailed rules for calculating Counterparty Risk requirements are set out in chapter 4 and in this appendix.

**Credit default products**

- A4.11.16** (1) The Protection Buyer relies on the Protection Seller to pay the Credit Event Payment if a Credit Event occurs, and therefore must record a Counterparty Risk Capital Component.
- (2) The Protection Seller is exposed to the Protection Buyer only if there are premium or interest rate-related payments outstanding.
- A4.11.17** In the case of Total Return Swaps, since each party relies on the other for payment, each party must record a Counterparty Risk Capital Component.
- A4.11.18** No Counterparty Risk Capital Component applies to Credit-linked Notes unless a coupon or interest payment is outstanding.

**Guidance**

The Potential Future Credit Exposure (PFCE) add-on used in calculating the Counterparty Exposure for an unfunded OTC Credit Derivative is determined by whether the Reference Asset is recognised as a Qualifying Debt Item or not. If the Reference Asset is a Qualifying Debt Item, the Authorised Firm is permitted to calculate the Counterparty Risk Capital Component using interest rate add-ons. Otherwise, the Authorised Firm must apply equity add-ons.

- A4.11.19** When calculating its Foreign Exchange Risk Capital Requirement, an Authorised Firm must feed the marked-to-market values of Credit Derivatives denominated in a currency other than the Authorised Firm's reporting currency into its monitoring and reporting of foreign exchange positions in the manner set out in chapter 4.

**Non-trading book capital treatment****Guidance**

Rules A4.11.20 to A4.11.35 provide specific Rules in respect of capital treatment of Non-Trading Book items.

- A4.11.20** An Authorised Firm must calculate the Capital Requirement for Non-Trading Book Credit Derivatives in accordance with chapter 4.

**Funded transactions****Guidance**

1. The treatment of funded Credit Derivatives in the Non-Trading Book is parallel to that of loan sub-participations. The Protection Buyer of a funded Credit Derivative reduces its Exposure to a Reference Asset by receiving up-front funding in the form of cash.
2. The Protection Seller of a funded Credit Derivative is acquiring Exposure to the Reference Asset (since performance of the Credit Derivative depends upon the

performance of the Reference Asset), the Protection Buyer (since the Authorised Firm relies upon the Protection Buyer to repay the funding provided) and to any Collateral that may have been provided by the Protection Buyer.

**A4.11.21** Where an asset is protected in full or in part by a funded Credit Derivative:

- (a) the Protection Buyer may reduce its Exposure to the Reference Asset by the amount of funding received;
- (b) the Protection Seller must treat its Exposure under the contract as an Exposure to the highest of the risk weights of the Reference Asset, the Counterparty holding the funds and, where applicable, the Collateral Security.

#### **Unfunded transactions**

**A4.11.22** Where an asset is protected in full or in part by an unfunded Credit Derivative:

- (a) the Protection Buyer may treat the Reference Asset as though guaranteed by the Protection Seller in accordance with IFR chapter 5 and may choose to replace the risk weighting of the protected asset with the risk weighting of the Counterparty to the Credit Derivative contract; and
- (b) the Protection Seller must recognise an Exposure to the Reference Asset and record the Exposure as a direct credit substitute, a guarantee, weighted according to the risk weight of the Reference Asset.

#### **Asset mismatch**

**A4.11.23** If the Reference Asset and the underlying asset being hedged are identical in all respects, the Protection Buyer may recognise the protection in full.

**A4.11.24** Where the Reference Asset and the underlying asset being hedged are different, the Protection Buyer may still recognise the protection if:

- (a) the Reference Asset and underlying asset are of the same obligor;
- (b) the Reference Asset ranks equally with, or is more junior in a liquidation than, the asset being hedged; and
- (c) there are cross-default clauses between the underlying asset and the Reference Asset.

#### **Payout structure**

##### **Guidance**

There are three common types of Credit Event Payment for a Credit Derivative contract:

- a. payment of a fixed amount;
- b. payment of the par value of the Reference Asset less the recovery value of the asset; and
- c. payment of the par value of the Reference Asset in exchange for the physical delivery of the Reference Asset.

**A4.11.25** Where the Credit Event Payment is payment of a fixed amount:

- (a) the Protection Buyer's Exposure to the Reference Asset is treated as guaranteed by the amount that the Authorised Firm will receive if a Credit Event occurs; and
- (b) the Protection Seller's Exposure to the Reference Asset is equal to the amount that the Authorised Firm will pay out if a Credit Event occurs.

**A4.11.26** Where the Credit Event payment is payment of par less the recovery value of the underlying asset, or payment of par in exchange for the physical delivery of the Reference Asset:

- (a) the Protection Buyer's Exposure to the Reference Asset is treated as guaranteed by the amount protected under the contract; and
- (b) the Protection Seller's Exposure to the Reference Asset is equal to the maximum possible payout under the contract.

#### **Currency mismatch**

**A4.11.27** Where the Credit Derivative is denominated in a different currency from that of the Reference Asset, the amount of protection recognised must be reduced by 8% to take account of the un-hedged contingent foreign currency risk.

**A4.11.28** Foreign currency positions created by Credit Derivatives must be recorded when measuring the Authorised Firm's foreign exchange Exposure (see chapter 5).

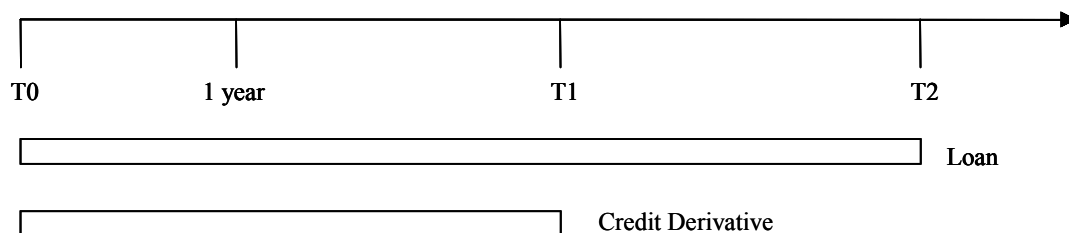
#### **Maturity mismatch**

**A4.11.29** Where the maturity of the Credit Derivative is less than that of the underlying asset, recognition of the protection depends upon the Residual Maturity of the Credit Derivative, in accordance with the following principles:

- (a) if the Residual Maturity of a Credit Derivative is less than one year, protection must not be recognised.
- (b) if the Residual Maturity of a Credit Derivative is one year or over, protection is recognised, but an additional Capital Requirement must be taken at inception for the forward credit Exposure to the underlying asset when the Credit Derivative contract matures.
- (c) the forward Exposure in (2) must be treated like a commitment with uncertain draw-down and must attract a 50% credit conversion factor ('CCF') against the risk weight of the underlying asset.
- (d) if the sum of the capital required for the underlying asset, after protection has been recognised, plus the forward Exposure exceeds the Capital Requirement for the underlying asset, the underlying asset may be weighted as normal and the Credit Derivative attracts no Capital Requirement.

**Guidance**

Examples of a Maturity Mismatch calculation:



1.
  - a. Suppose that the underlying asset is a loan to a corporate person of a maturity equal to T2, risk weighted at 100%, and credit protection is bought from a Zone 1 deposit-taker in the form of a Credit Default Product maturing at T1.
  - b. At T0, the risk weight on the loan is reduced to 20% (for the Credit Risk protected portion of the exposure) with an additional risk weight for the forward exposure of 50% (i.e. CCF for a commitment with uncertain draw-down of 50% x the original risk weight of the loan of 100%). So the total risk weight of the loan at T0 is  $20\% + 50\% = 70\%$ .
  - c. When the Residual Maturity of the Credit Derivative falls below one year, protection ceases to be recognised and the risk weight of the loan reverts to 100%.
  - d. If the underlying position is an undrawn credit commitment to a corporate person, the capital treatment resulting from the acquisition of Maturity Mismatched unfunded protection at T0 is as follows:
    - i. 10% risk weight, which is equal to 20% (the risk weight of a Zone 1 deposit-taker) x 50% (CCF of an undrawn credit commitment), plus
    - ii. 25% risk weight, which is equal to 50% (i.e. the original risk weight of the corporate person x CCF of an undrawn commitment) x 50% (which is the CCF of a commitment with uncertain draw-down).
2. So, in this example, the total risk weight of the undrawn credit commitment to a corporate person is  $10\% + 25\% = 35\%$ .

**A4.11.30 Multiple names**
**Guidance**

Where a Credit Derivative is referenced to more than one obligor, that is, a basket or multiple name product, the nature of the credit protection provided or acquired depends on the structure of the contract.

**A4.11.31** If the Credit Derivative is to pay out on the first asset to default in the basket, then protection must only be recognised against one asset in the basket. An Authorised Firm may choose which asset in the basket attracts protection.

**A4.11.32** If the contract referred to in Rule A4.11.31 allocates protection proportionately amongst assets in the basket, protection may be recognised in setting Capital Requirements against all the assets in the basket according to their proportions in the contract.

**Maturity**

- A4.11.33** The Protection Seller of a Credit Derivative must treat the maturity of the product as its contractual maturity.
- A4.11.34** If the contract referred to in Rule A4.11.31 terminates and pays out on the first asset to default in the basket, the Protection Seller must record an Exposure to all the Reference Assets covered in the contract and calculate a Capital Requirement accordingly. The risk weighting of the Reference Assets must be applied by the Protection Seller to the maximum payout amount under the contract for each asset in the basket, capped at the equivalent of a deduction from capital.
- A4.11.35** A Credit Derivative structure that is referenced to the assets in the basket proportionately must be risk weighted according to those assets in the proportions set out in the contract.

**Credit spread options**

- A4.11.36** If an Authorised Firm is entering into a Credit Spread Option which is eligible for inclusion in the Trading Book, the Authorised Firm must comply with the Trading Book requirements set out in this section.
- A4.11.37** An Authorised Firm must not take into account for capital purposes, protection bought for Non-Trading Book purposes using a Credit Spread Option.
- A4.11.38** An Authorised Firm must record protection sold using a Credit Spread Option as a direct credit substitute. The amount of the Exposure must be the par value of the nominal amount of the Reference Asset.

**Risk transfer requirements**

- A4.11.39** If an Authorised Firm is to reduce Capital Requirements using the purchased protection or an offsetting short position, the Credit Risk transfer must not contravene any terms and conditions relating to the Reference Asset and all necessary consents must have been obtained.
- A4.11.40** An Authorised Firm must transfer the Credit Risk associated with an asset to the Protection Seller in order for purchased protection or an offsetting short position to be recognised.
- A4.11.41** An Authorised Firm must not treat the Credit Risk on an asset as having been transferred to the Protection Seller unless:
- (a) the Protection Buyer has no obligation to repay any funding received under the Credit Derivative except at termination or as a result of a defined Credit Event;
  - (b) the Protection Buyer has given notice to the Protection Seller that it is under no obligation to repay the funding, except as defined in (a) above, nor to support any losses suffered by the Protection Seller; and
  - (c) the Protection Seller acknowledges the absence of the obligation in (b) above.

**A4.11.42** Where the risk transfer requirements set out above are not met an Authorised Firm must:

- (a) ignore protection bought in the Non-Trading Book and must continue to weight the underlying asset as normal; and
- (b) not offset a Specific Risk position recorded in the Trading Book as a result of the Credit Derivative against any other Specific Risk position.



## **APP5 MARKET RISK**

### **A5.1 Market risk systems and controls**

#### **Guidance**

1. In accordance with section 5.2, an Authorised Firm is required to have a Market Risk policy. The Market Risk policy should address all aspects of Market Risk whether arising from assets, liabilities or the mismatch between assets and liabilities and whether off or on-balance sheet. Such a policy would be expected to include the following information:
  - a. how, with particular reference to its activities, the Authorised Firm defines and measures Market Risk;
  - b. the Authorised Firm's investment or trading strategy distinguishing, as applicable, between its Trading and Non-Trading Books;
  - c. the detailed limit structure for Market Risk which should:
    - i. address all key risk factors;
    - ii. be commensurate with the volume and complexity of activity; and
    - iii. be consistent with the Authorised Firm's strategy, historical performance, and the overall level of earnings or capital the Authorised Firm is willing to risk;
  - d. procedures for:
    - i. approving new products and activities that give rise to Market Risk;
    - ii. regular risk position and performance reporting;
    - iii. limit exception reporting and approval; and
    - iv. reporting and controlling of off-market trades, if these are permitted;
  - e. where internal models are used to set Capital Requirements (as provided for in section 5.3), the methods and assumptions used in these models and how the models are tested; and
  - f. the allocation of responsibilities for implementing the Market Risk policy and for monitoring adherence to, and the effectiveness of, the policy.
2. An Authorised Firm should measure its Market Risk using a robust and consistent methodology. The appropriate method of measurement will depend upon the nature of the products traded. The Authorised Firm should consider whether the measurement methodologies should be tested, for example, through back-testing, and the frequency of such testing.
3. An Authorised Firm should be able to measure its Market Risk exposure both across risk types, such as interest rate, foreign exchange and commodities, and across the entire portfolio.

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4. Where an Authorised Firm is a member of a Group, which is subject to consolidated supervision, the Group should be able to monitor Market Risk exposures on a consolidated basis (chapter 7).
5. An Authorised Firm should have the capability to assess the impact of any new transaction on its Market Risk position on an on-going basis, and should be capable of carrying out a full measurement of its positions at least daily.
6. An Authorised Firm should implement an effective system for monitoring its Market Risk. This system should be independent of those within the Authorised Firm who are responsible for taking Market Risk.
7. An Authorised Firm should implement a system of management reporting which provides relevant, accurate, comprehensive, timely and reliable Market Risk reports to relevant functions within the Authorised Firm. These reports should:
  - a. alert senior management's attention to the size of exposures and the relationship between these exposures and limits;
  - b. cover exceptions to the Authorised Firm's Market Risk policy;
  - c. present the results from stress tests undertaken; and
  - d. analyse and explain any changes to the level and nature of Market Risk and any remedial action proposed or taken.
8. An Authorised Firm should have procedures, including stop-loss procedures, for taking appropriate action according to the information within the management reports.
9. An Authorised Firm should ensure that there are controls and procedures for reporting any trades booked at off-market rates.
10. An Authorised Firm should ensure that risk monitoring is subject to a periodic independent check. Models used to determine or interpolate specific Market Risk factors should be independently reviewed or otherwise validated.
11. Particular attention should be given to the monitoring of Market Risk that does not conform to the usual Market Risk policy, or which exceeds predetermined Market Risk limits and criteria, but is sanctioned because of particular circumstances in accordance with the Authorised Firm's procedures. Unauthorised exceptions to policies, procedures and limits should be reported in a timely manner to the appropriate level of management along with any remedial action proposed or taken.
12. Market Risk limits should be periodically reviewed in order to check their suitability for current market conditions and the Authorised Firm's overall risk appetite.
13. An Authorised Firm should use a model or some form of analytical tool to assess risk in complex instruments or across portfolios. An Authorised Firm which wishes to use such a model to determine part of its financial resources requirement, should refer to section 5.3.
14. An Authorised Firm should also use stress testing to determine the potential effects of economic downturns, market events, changes in interest rates, foreign exchange or Liquidity conditions.
15. An Authorised Firm should set an appropriate limit structure to control its Market Risk exposure. The degree of granularity within the limit structure, or how hierarchical it is, will depend on the nature of the products traded (for example, whether the underlying risks are linear or non-linear) and the scale of the Authorised Firm's overall business (for example, whether the Authorised Firm is an active market maker). An Authorised Firm

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should set limits on risks such as simple price or rate risk as well as on the factors, Delta, Gamma, Vega, Rho, and Theta, arising from options positions.

16. Limits should also be imposed against net or gross positions, and in relation to maximum allowable loss ('stop-loss'), value at risk, maturity gap, and illiquid or volatile markets.
17. An Authorised Firm should provide a process for the identification, timely reporting and subsequent action in respect of exceptions to limits. An Authorised Firm should also ensure that limit breaches and action arising from exceptions are monitored. An Authorised Firm may also consider whether it is appropriate to set intermediate thresholds that alert management when limits are approached, triggering review or other appropriate action, or both.
18. Various methods can be used to hedge Market Risk. An Authorised Firm should document the appropriate products to be used to hedge exposure and identify individuals within the Authorised Firm or Group responsible for monitoring hedge performance.
19. An Authorised Firm should ensure that it makes and maintains appropriate prudential records which show and explain the Authorised Firm's transactions, disclose its financial position and exposure to Market Risk and enable it to demonstrate compliance with the DFSA rules. In particular, an Authorised Firm should have data history to enable it to perform back-testing of methods and assumptions used for stress and scenario testing and for value-at-risk models. Market Risk records should be retained for at least six years.
20. Authorised Firms are encouraged to develop internal Market Risk models and, subject to meeting the requirements set out in section 5.3, to apply to the DFSA for a waiver from the relevant requirements. With respect to Authorised Firms which maintain substantial and active Trading Book positions, the DFSA may require the use of such internally developed models for the purposes of measuring and reporting their Market Risk capital requirements.

## **A5.2 Interest rate risk capital requirement**

### **Guidance**

Section A5.2 presents the method for the calculation of Specific Risk and General Market Risk in respect of the Interest Rate Risk Capital Requirement as referred to in Rule 5.4.2.

- A5.2.1** An Authorised Firm which calculates its Interest Rate Risk Capital Requirement in accordance with Rule 5.4.2(b) must apply the Rules in this section.
- A5.2.2** An Authorised Firm must calculate its Interest Rate Risk Capital Requirement as the sum of the two following separate charges:
  - (a) Specific Risk of each net position as calculated in accordance with Rule A5.2.13; and
  - (b) General Market Risk calculated in accordance with Rule A5.2.15.
- A5.2.3** An Authorised Firm must calculate its Interest Rate Risk Capital Requirement in Trading Book positions in all fixed-rate and floating-rate debt Securities and instruments which behave like them, including:
  - (a) non-convertible preference shares;

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- (b) futures or forwards on a debt security or on interest rates;
- (c) swaps (or contracts for differences) whose value is based on interest rates;
- (d) the cash leg of a repurchase or a reverse repurchase agreement;
- (e) forward foreign exchange contracts or currency futures;
- (f) interest rate legs of equity swaps;
- (g) interest rate legs of equity futures or forwards; and
- (h) interest rate legs of equity based options treated under internal models in section 5.3.

**Guidance**

Where these positions will require the derivation of notional positions before they can be included in the calculation of Specific Risk and General Market Risk Requirements, an Authorised Firm must derive the notional positions in accordance with Rules A5.2.5 to A5.2.12.

- A5.2.4** (1) An Authorised Firm may net, by value, long and short positions in the same debt instrument in its Trading Book to generate the individual net position in that instrument.
- (2) Instruments are considered to be the same for the purposes of (1) where:
- (a) the issuer is the same;
  - (b) the instruments have equivalent standing in liquidation; and
  - (c) the currency, coupon and maturity are the same.

**Derivation of notional positions for certain instruments (including interest rate derivatives)**

- A5.2.5** (1) The interest rate risk measurement must include all interest rate derivatives and off-balance sheet instruments in the Trading Book that react to changes in interest rates, including forward rate agreements other forward contracts, futures, interest rate and cross-currency swaps and forward foreign exchange positions.
- (2) Derivatives must be converted into positions in the relevant underlying Instruments and are subject to Specific and General Market Risk Requirements set out in Rules A5.2.13 and A5.2.15. The amounts used in the calculation must be the market values of the principal amount of the underlying Instrument or of the notional underlying Instrument.
- (3) The manner in which an Authorised Firm must derive a notional position (in the currency concerned) for certain instruments (including interest rate derivatives) is set out in Rules A5.2.6 to A5.2.12.

**Futures on interest rates and forward rate agreements**

- A5.2.6** (1) A future on an interest rate and a forward rate agreement must be treated as two notional zero coupon government Securities as follows:
- (a) where an Authorised Firm sells an interest rate future or buys a forward rate agreement:
    - (i) the notional short position has a maturity equal to the time to expiry of the future (or the settlement date of the forward rate agreements) plus the maturity of the borrowing period; and
    - (ii) the notional long position has a maturity equal to the time to expiry of the future (or the settlement date of the forward rate agreement); and
  - (2) where an Authorised Firm buys an interest rate future or sells a forward rate agreement:
    - (a) the notional short position has a maturity equal to the time to expiry of the future (or the settlement date of the forward rate agreement); and
    - (b) the notional long position has a maturity equal to the time to expiry of the future (or the settlement date of the forward rate agreement) plus the maturity of the deposit period.

**Futures and forwards on a single debt security**

- A5.2.7** A future and a forward on a single debt Security must be treated as a notional debt Security and a notional zero coupon government Security as follows:
- (a) where an Authorised Firm has bought the future or forward:
    - (i) a notional long position in the underlying Security with a maturity:
      - (A) in the case of a fixed rate bond, equal to the underlying Security;
      - (B) in the case of a floating rate bond, at the time to the next reset; and
    - (ii) a notional short position in a zero coupon government Security with a maturity equal to the time to expiry of the futures contract; and
  - (b) where an Authorised Firm has sold the future or forward:
    - (i) a notional short position in the underlying Security with a maturity:
      - (A) in the case of a fixed rate bond, equal to the underlying Security; and

- (B) in the case of a floating rate bond, at the time to the next reset; and
- (ii) a notional long position in a zero coupon government Security with a maturity equal to the time to expiry of the futures contract.

#### **Future or forward on a basket of debt securities**

**A5.2.8** A future and a forward on a basket of debt Securities must be treated as a set of notional positions in the constituent debt Securities.

#### **Interest rate and currency swaps**

**A5.2.9** An interest rate and a currency swap must be treated as two notional government Securities as follows:

- (a) where the Authorised Firm is receiving fixed rate interest and paying floating rate interest:
  - (i) a notional long position with a maturity equal to the length of the swap; and
  - (ii) a notional short position with a maturity equal to the period remaining to the next interest rate reset date;
- (b) where the Authorised Firm is paying fixed rate interest and receiving floating rate interest:
  - (i) a notional short position with a maturity equal to the length of the swap; and
  - (ii) a notional long position with a maturity equal to the period remaining to the next interest rate reset date;
- (c) where the Authorised Firm is receiving fixed rate interest and paying fixed rate interest:
  - (i) a notional long position with a maturity equal to the length of the swap; and
  - (ii) a notional short position with a maturity equal to the length of the swap.
- (d) where the Authorised Firm is receiving floating rate interest and paying floating rate interest:
  - (i) a notional long position with a maturity equal to the period remaining to the next interest date reset date; and
  - (ii) a notional short position with a maturity equal to the period remaining to the next interest rate reset date.
- (e) the two notional government Securities must have a coupon equal to the rate of interest payable or receivable on the leg.

**Guidance**

A currency swap is also subject to a Foreign Exchange Risk Capital Requirement (see section 5.5).

**Dual currency bonds**

**A5.2.10** A dual currency bond must be treated as two positions as follows:

- (a) a debt Security denominated in the currency in which the dual currency bond is issued; and
- (b) a foreign exchange forward for the purchase of the redemption currency (see section 5.6)

**Cash legs of repos**

**A5.2.11** The forward cash leg of a repo must be treated as a notional short position in a government Security with a maturity equal to that of the repo and coupon equal to the repo rate.

**Guidance**

If a Security is repo'd, the Authorised Firm continues to calculate an Interest Rate Risk Capital Requirement on the Security because, although legal ownership transfers to the Counterparty, the economic benefit or loss remains with the Authorised Firm.

**Cash legs of reverse repos**

**A5.2.12** The forward cash leg of a reverse repo must be treated as a notional long position in a government security with a maturity equal to that of the reverse repo and coupon equal to the repo rate.

**Guidance**

1. If a Security is reverse repo'd, the Authorised Firm does not calculate an Interest Rate Risk Capital Requirement on the Security because, although the firm obtains the legal title, the economic benefit or loss remains with the original holder.
2. An Authorised Firm may exclude from the interest rate maturity framework (for both Specific and General Market Risk) long and short positions (both actual and notional) in identical derivative instruments with exactly the same issuer, coupon, currency and maturity. A fully-matched position in a future or forward and its corresponding underlying Instrument may also be fully offset, and thus excluded from the calculation.

**Specific risk****Guidance**

In respect of interest rate risk, a capital charge for Specific Risk is designed to protect against an adverse movement in the price of an individual Security owing to factors related to the individual issuer.

**A5.2.13** (1) An Authorised Firm must calculate its Specific Risk as the sum of the market values of the individual net positions (whether they are long or short) multiplied by the appropriate risk percentage in (3).

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- (2) An Authorised Firm must not offset between different issues.
- (3) An Authorised Firm must determine the appropriate risk percentage by reference to the following table:

	<b>Risk Percentage</b>
An issue of, or fully guaranteed by, or fully collateralised by, a Zone 1 central government or central bank.	0.00%
An issue of, or fully guaranteed by, or fully collateralised by, a Zone 2 central government or central bank, where the Security is denominated in the local currency of the Issuer.	
An issue of, or fully guaranteed by, or fully collateralised by, an international development bank or a Zone 1 deposit taker.	Where the residual term to final maturity is 6 months or less: 0.25%.
A debt item (including money market obligations) rated as Investment Grade, in accordance with Rule A5.2.14.	Where the residual term to final maturity is between 6 and 24 months: 1.0%.
	Where the residual term to final maturity exceeds 24 months: 1.60%.
Other.	8% or such other percentage as the DFSA may direct.

**Guidance**

1. Offsetting is not permitted since differences in coupon rates, Liquidity, and call features, for example, signify that prices may diverge in the short run.
2. The “Other” category will receive the same Specific Risk requirement as a private-sector borrower under the Credit Risk Capital Requirements, 8%. However, since this may, in certain cases, considerably underestimate the Specific Risk for debt Securities which have a high yield to redemption relative to government debt Securities, the DFSA has the right to apply to such Securities a Specific Risk percentage higher than 8%.

- A5.2.14** (1) A debt item is rated as Investment Grade where:
- (a) two relevant credit rating agencies rate the debt item as Investment Grade; or
  - (b) one relevant credit rating agency rates the debt item as Investment Grade and it is not rated at all by any other relevant credit rating agency.
- (2) The relevant credit rating agencies for the purposes of Rule A5.2.14 and the minimum ratings which must be applied for the debt item to be regarded as Investment Grade are set out in the following table:
- (3)



Relevant rating agencies	Minimum ratings	
	Securities	Money market obligations
For all issuers		
Moody's Investors Service	Baa3	P3
Standard & Poors Corporation	BBB-	A3
FITCH Ratings Ltd	BBB-	F-3
For Canadian issuers		
Canadian Bond Rating Service	B++ low	A-3
Dominion Bond Rating Service	BBB low	R-2
For Japanese issuers		
Japan Credit Rating Agency, Ltd	BBB-	J-2
Japan Rating and Investment Information Inc	BBB-	A-2
Mikuno & Co	BBB	M-3

**General market risk**

- A5.2.15** (1) An Authorised Firm must calculate its General Market Risk on a currency by currency basis, irrespective of where the individual instruments are physically traded or listed. The calculations for each currency must then be added together to determine the amount of the Authorised Firm's General Market Risk Requirement.
- (2) An Authorised Firm must calculate its General Market Risk Requirement for each currency by applying either:
- (a) the Simplified framework set out in Rule A5.2.16;
  - (b) the Maturity Method set out in Rule A5.2.17; or
  - (c) with the consent of the DFSA, the Duration Method set out in Rule A5.2.19.

**Simplified framework**

- A5.2.16** In applying the Simplified framework, an Authorised Firm must calculate its General Market Risk Requirement for each currency by taking the following steps:
- (a) allocating the individual net positions to one of the time bands in the table below, as follows:
    - (i) fixed-rate instruments are allotted their time bands based upon the residual time to maturity; and

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- (ii) floating-rate instruments are allocated to time bands based upon the time remaining to the re-determination of the coupon;
- (b) adding the market values of the individual net positions within each band irrespective of whether they are long or short positions to produce a gross position figure;
- (c) multiplying the amount in (b) above by the risk percentage for the relevant maturity band in the table below; and
- (d) adding the calculations in (c) to arrive at the General Market Risk Requirement.

Zone	Time band		Risk percentage
	Coupon of 3% or more	Coupon of less than 3%	
A	0 ≤ 1 month	0 ≤ 1 month	0.00%
	> 1 ≤ 3 months	> 1 ≤ 3 months	0.20%
	> 3 ≤ 6 months	> 3 ≤ 6 months	0.40%
	> 6 ≤ 12 months	> 6 ≤ 12 months	0.70%
B	> 1 ≤ 2 years	> 1.0 ≤ 1.9 years	1.25%
	> 2 ≤ 3 years	> 1.9 ≤ 2.8 years	1.75%
	> 3 ≤ 4 years	> 2.8 ≤ 3.6 years	2.25%
C	> 4 ≤ 5 years	> 3.6 ≤ 4.3 years	2.75%
	> 5 ≤ 7 years	> 4.3 ≤ 5.7 years	3.25%
	> 7 ≤ 10 years	> 5.7 ≤ 7.3 years	3.75%
	> 10 ≤ 15 years	> 7.3 ≤ 9.3 years	4.50%
	> 15 ≤ 20 years	> 9.3 ≤ 10.6 years	5.25%
	> 20 years	> 10.6 ≤ 12.0 years	6.00%
		> 12.0 ≤ 20.0 years	8.00%
	> 20 years	12.50%	

**Guidance**

The risk percentages in the table above are designed to reflect the price sensitivity of the positions to changes in the interest rate.

**Maturity method**

**A5.2.17** Under the Maturity Method, the following steps must be carried out:

- (a) the maturity weighted position for each instrument must be calculated by multiplying the market value of each individual long or short net position by the appropriate risk percentage per the table in Rule A5.2.16;
- (b) the sum of the weighted long and the sum of the weighted short positions in each maturity band must be calculated;
- (c) these weighted long and short positions must be matched within a maturity band to give the total matched weighted position in the maturity band and the total unmatched weighted position which will be long or short in the maturity band;
- (d) the matched weighted positions in all maturity bands must be summed;
- (e) the unmatched weighted positions in all the maturity bands must then be matched within a zone leaving an unmatched position for the zone (which will either be short or long); and
- (f) the unmatched positions in each zone must be matched with the unmatched positions in other zones leaving the residual unmatched weighted position.

**A5.2.18** The General Market Risk Requirement for each currency must be calculated as the sum of the following:

- (a) 10% of the matched weighted positions in each maturity band;
- (b) 40% of the matched weighted position in zone A;
- (c) 30% of the matched weighted position in zones B and C;
- (d) 40% of the matched weighted position between zones A and B, and between zones B and C;
- (e) 150% of the matched weighted position between zones A and C; and
- (f) 100% of the residual unmatched weighted positions.

**Guidance**

A worked example under the Maturity Method of the General Market Risk Requirement calculation is as follows:



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Zone	Maturity Band		Individual Net Positions		Risk percentages	Weighted Individual Net Positions		By Maturity Band		By Zone		Between Zones	
	Coupon ≥3%	Coupon <3%	Long	Short		Long	Short	Matched	Unmatched	Matched	Unmatched	Matched	Unmatched
A	≤ 1 month	≤ 1 month	\$100	-\$50	0.00%	\$0.00	\$0.00	\$0.00	\$0.00				
	1 - 3 months	1 - 3 months	\$200	-\$100	0.20%	\$0.40	-\$0.20	\$0.20	\$0.20	\$0.00	\$1.30		
	3 - 6 months	3 - 6 months	\$300	-\$200	0.40%	\$1.20	-\$0.80	\$0.80	\$0.40				
	6 - 12 months	6 - 12 months	\$400	-\$300	0.70%	\$2.80	-\$2.10	\$2.10	\$0.70				
B	1 - 2 years	1 - 1.9 years	\$100	-\$200	1.25%	\$1.25	-\$2.50	\$1.25	-\$1.25			Zone 1&2	
	2 - 3 years	1.9 - 2.8 years	\$200	-\$300	1.75%	\$3.50	-\$5.25	\$3.50	-\$1.75	\$0.00	-\$5.25	\$1.30	
	3 - 4 years	2.8 - 3.6 years	\$300	-\$400	2.25%	\$6.75	-\$9.00	\$6.75	-\$2.25				Zones 1&3
													\$0.00
C	4 - 5 years	3.6 - 4.3 years	\$100	-\$100	2.75%	\$2.75	-\$2.75	\$2.75	\$0.00			Zone 2&3	
	5 - 7 years	4.3 - 5.7 years	\$200	-\$200	3.25%	\$6.50	-\$6.50	\$6.50	\$0.00			\$3.95	
	7 - 10 years	5.7 - 7.3 years	\$300	-\$100	3.75%	\$11.25	-\$3.75	\$3.75	\$7.50				
	10 - 15 years	7.3 - 9.3 years	\$100	-\$200	4.50%	\$4.50	-\$9.00	\$4.50	-\$4.50	\$4.50	\$8.25		
	15 - 20 years	9.3 - 10.6 years	\$200	-\$100	5.25%	\$10.50	\$5.25	\$5.25	\$5.25				
	> 20 years	10.6 - 12 years	\$300	-\$300	6.00%	\$18.00	-\$18.00	\$18.00	\$0.00				
		12 - 20 years			8.00%								
		> 20 years			12.50%								
								\$55.35			\$4.30		

Total General Market Risk Requirement = 10% (\$55.35) + 40% (\$0.00) + 30% (\$0.00 + \$4.50) + 40% (\$1.30 + \$3.95) + 100% (\$4.30) + 150% (\$0.00) = \$13.29

### Duration method

**A5.2.19** An Authorised Firm with the necessary capability may, with the consent of the DFSA, use the Duration Method, which produces a more accurate measure for General Market Risk than the Maturity Method. An Authorised Firm must elect and use the Duration Method on a continuous basis and will be subject to supervisory monitoring of the systems used.

**A5.2.20** Under the Duration Method, the following steps must be carried out:

- (a) the duration weighted position for each instrument must be calculated by multiplying the market value of each individual long or short net position by the Modified Duration and the assumed interest rate change per the table below;
- (b) the sum of the weighted long and the sum of the weighted short positions in each time band must be calculated;
- (c) these weighted long and short positions must be matched within a maturity band to give the total matched weighted position in the maturity band and the total unmatched weighted position which will be long or short in the maturity band;
- (d) the matched weighted positions in all maturity bands must be summed;
- (e) the unmatched weighted positions in all the maturity bands must then be matched within a zone leaving an unmatched position for the zone (which will either be short or long); and
- (f) the unmatched positions in each zone must be matched with the unmatched positions in other zones leaving the residual unmatched weighted position.

Zone	Modified Duration	Assumed move in interest rates (percentage points)
A	0 ≤ 1 month	1.00
	> 1 ≤ 3 months	1.00
	> 3 ≤ 6 months	1.00
	> 6 ≤ 12 months	1.00
B	> 1.0 ≤ 1.9 years	0.90
	> 1.9 ≤ 2.8 years	0.80
	> 2.8 ≤ 3.6 years	0.75
Zone	Modified Duration	Assumed move in interest rates (percentage points)
C	> 3.6 ≤ 4.3 years	0.75
	> 4.3 ≤ 5.7 years	0.70
	> 5.7 ≤ 7.3 years	0.65
	> 7.3 ≤ 9.3 years	0.60

Zone	Modified Duration	Assumed move in interest rates (percentage points)
	> 9.3 ≤10.6 years	0.60
	> 10.6 ≤12.0 years	0.60
	> 12.0 ≤20.0 years	0.60
	> 20 years	0.60

**A5.2.21** For the purposes of this section Modified Duration is calculated as follows:

$$\text{Modified Duration} = \frac{\text{duration (D)}}{(1 + r)}$$

$$D = \frac{\sum_{t=1}^m \frac{tC_t}{(1+r)^t}}{\sum_{t=1}^m \frac{C_t}{(1+r)^t}}$$

where:

r = yield to maturity

C<sub>t</sub> = cash payment in time t

m = total maturity

**A5.2.22** The General Market risk requirement for each currency must be calculated as the sum of the following:

- 5% of the matched weighted positions in each time band;
- 40% of the matched weighted position in zone A;
- 30% of the matched weighted position in zones B and C;
- 40% of the matched weighted position between zones A and B, and between zones B and C;
- 150% of the matched weighted position between zones A and C; and
- 100% of the residual unmatched weighted positions.

**Guidance**

A worked example of the General Market Risk Requirement calculation under the Duration Method is as follows:



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Zone	Modified Duration	Individual Positions		Net Assumed move in (%p.a)	Modified Duration (years)	Weighted Individual Positions		By Timeband		By Zone		Between Zones	
		Long	Short			Long	Short	Matched	Unmatched	Matched	Unmatched	Matched	Matched
A	(years)												
	< 1 month	\$100.00	-\$50.00	1.00%	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.30		
	1 to 3 months	\$200.00	-\$100.00	1.00%	0.20	\$0.40	-\$0.20	\$0.20	\$0.20				
	3 to 6 months	\$300.00	-\$200.00	1.00%	0.40	\$1.20	-\$0.80	\$0.80	\$0.40				
	6 to 12 months	\$400.00	-\$300.00	1.00%	0.70	\$2.80	-\$2.10	\$2.10	\$0.70				
B	1 to 1.9 years	\$100.00	-\$200.00	0.90%	1.40	\$1.26	-\$2.52	\$1.26	-\$1.26	\$0.00	-\$5.27	Zone 1&2	
	1.9 to 2.8 years	\$200.00	-\$300.00	0.80%	2.20	\$3.52	-\$5.28	\$3.52	-\$1.76			\$1.30	
	2.8 to 3.6 years	\$300.00	-\$400.00	0.75%	3.00	\$6.75	-\$9.00	\$6.75	-\$2.25				Zones 1&3
													\$0.00
C	3.6 to 4.3 years	\$100.00	-\$100.00	0.75%	3.65	\$2.74	-\$2.74	\$2.74	\$0.00	\$4.50	\$8.89	Zone 2&3	
	4.3 to 5.7 years	\$200.00	-\$200.00	0.70%	4.65	\$6.51	-\$6.51	\$6.51	\$0.00			\$3.97	
	5.7 to 7.3 years	\$300.00	-\$100.00	0.65%	5.80	\$11.31	-\$3.77	\$3.77	\$7.54				
	7.3 to 9.3 years	\$100.00	-\$200.00	0.60%	7.50	\$4.50	-\$9.00	\$4.50	-\$4.50				
	9.3 to 10.6 years	\$200.00	-\$100	0.60%	9.75	\$11.70	-\$5.85	\$5.85	\$5.85				
	10.6 to 12 years	\$0.00	\$0.00	0.60%	11.00	\$0.00	\$0.00	\$0.00	\$0.00				
	12 to 20 years	\$300.00	-\$300.00	0.60%	14.50	\$26.10	-\$26.10	\$26.10	\$0.00				
	Over 20 years	\$0.00	\$0.00	0.60%	22.00	\$0.00	\$0.00	\$0.00	\$0.00				
								\$64.10			\$4.92		

Total General Market Risk Requirement =  
 5% (\$64.10) + 40% (\$0) + 30% (\$4.50) + 40% (\$5.27) + 150% (\$0) + 100% (\$4.92) = \$11.58

### **A5.3 Equity risk capital requirement**

#### **Guidance**

Section A5.3 presents the method for the calculation of Equity Risk Capital Requirement for the purpose of Rule 5.4.2(b).

**A5.3.1** An Authorised Firm which calculates its Equity Risk Capital Requirement in accordance with Rule 5.4.2(b) must apply the Rules in this section.

**A5.3.2** An Authorised Firm must calculate its Equity Risk Capital Requirement by:

- (a) identifying all applicable positions within the scope of the requirement, including notional positions derived from certain instruments;
- (b) netting positions where they meet the conditions for Netting set in Rules A5.3.19 and A5.3.20;
- (c) calculating an Equity Risk Capital Requirement for each individual position using the standard method in accordance with Rule A5.3.25 or the simplified method in accordance with Rule A5.3.33;
- (d) in the case of a forward, future, option or company issued warrant on an equity, basket of equities or equity index, adding an Interest Rate Risk Capital Requirement; and
- (e) summing the capital requirements calculated in accordance with (c) and (d) above.

#### **Guidance**

For the purposes of Rule A5.3.2(d), an Authorised Firm is required to calculate the applicable Interest Rate Risk Capital Requirement in accordance with Rule A5.2.13 and the other applicable Rules in section A5.2.

**A5.3.3** (1) For the purposes of Rule A5.3.2(a) an Authorised Firm must calculate an Equity Risk Capital Requirement for long and short Trading Book positions in equities and instruments which exhibit behaviour similar to equities including but not limited to:

- (a) depository receipts;
- (b) futures or forwards on an equity, baskets of equities or equity indices;
- (c) net underwriting commitments; and
- (d) investments in unleveraged Collective Investment Funds.

(2) An Authorised Firm should calculate either an Equity Risk Capital Requirement or an Option Risk Capital Requirement for a Trading Book position in:

- (a) an equity hedging an option;



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- (b) an equity hedging a company-issued warrant;
- (c) an option on an equity, basket of equities, equity index or equity future provided it is in the money by at least the risk percentage stipulated in A5.3.33; and
- (d) a company issued warrant which relates to an equity, basket of equities or equity index provided it is in the money by at least the risk percentage stipulated in A5.3.33.

**Guidance**

1. If an Authorised Firm has an investment in a leveraged Collective Investment Fund, it should seek guidance from the DFSA in respect of the appropriate prudential treatment.
2. In respect of options that are out of the money, an Authorised Firm must apply the requirements of section 5.8.

**A5.3.4** An Authorised Firm must calculate either an Equity Risk Capital Requirement or an Option Risk Capital Requirement for a Trading Book position in the equity leg of an equity swap in accordance with Rule A5.3.12.

**A5.3.5** An Authorised Firm must calculate either an Equity Risk Capital Requirement or Interest Rate Risk Capital Requirement for a Trading Book position in a Convertible in accordance with Rules A5.3.6 and A5.3.7.

**A5.3.6** An Authorised Firm must treat a Convertible as the underlying equity into which it converts, where:

- (a) the first date at which conversion can take place is less than three months ahead, or the next such date (where the first has passed) is less than a year ahead; and
- (b) the Convertible is trading at a premium of less than 10% to the underlying equity.

**A5.3.7** An Authorised Firm which treats a Convertible as an equity must make an adjustment to the capital component as follows:

- (a) an addition equal to any loss on conversion; or
- (b) a deduction equal to any profit on conversion (subject to a maximum reduction to zero).

**A5.3.8** An Authorised Firm must not calculate an Equity Risk Capital Requirement for a Trading Book position in:

- (a) material holdings deducted under Rule 2.7.5 for the purposes of calculating an Authorised Firm's Capital Resources;
- (b) the interest rate leg of an equity swap, equity future or forward, or equity based option; or
- (c) a non-Convertible preference security.

**Derivation of notional positions**

**A5.3.9** An Authorised Firm must, before netting, derive a notional position for a depository receipt, a swap, a future, a forward, an option and a company issued warrant in the calculation of its Equity Risk Capital Requirement.

**Depository receipts**

**A5.3.10** An Authorised Firm must treat a depository receipt as a notional position in the underlying equity.

**A5.3.11** A position in a depository receipt must only be netted against a position in the underlying equity if the equity is deliverable against the depository receipt.

**Equity swaps**

**A5.3.12** An Authorised Firm must treat an equity swap as two notional positions: an interest rate leg and an equity leg, as follows:

- (a) the interest rate leg must be included in the Interest Rate Risk Calculation and treated as a notional government Security in accordance with the provisions for interest rate swaps in section 5.4; and
- (b) the equity leg must be treated as a long or short position in:
  - (i) where the payout or receipt of funds is based on, respectively, the appreciation or depreciation in price of the underlying equities, a future; or
  - (ii) where the payout is the appreciation in price of the underlying equities, an option, in which case the Authorised Firm must calculate an Option Risk Capital Requirement in accordance with section 5.8.

**Equity futures and forwards**

**A5.3.13** An Authorised Firm must treat a future or forward on a single equity as a notional position in the underlying equity. In addition, an interest rate leg must be included in the interest rate risk calculation in section 5.4 as a notional government security.

**A5.3.14** An Authorised Firm must treat a future or forward on a single country equity index as either:

- (a) notional positions in the constituent equities; or
- (b) a single notional position.

**A5.3.15** Where Rule A5.3.14(b) applies, an Authorised Firm must apply the highest risk percentage to the single notional position that would apply to any one of its constituents.

**A5.3.16** An Authorised Firm must treat a future or forward on a multiple country equity index as either:

- (a) notional positions in the constituent equities; or
- (b) a number of notional positions being one for each of the countries which is represented in the index, in the proportion of that country's representation in the index.

**A5.3.17** Where Rule A5.3.16(b) applies, an Authorised Firm must apply the highest risk percentage to each notional position that would apply to any one of its constituents.

#### **Equity options and company issued warrants**

**A5.3.18** An Authorised Firm must treat an option or company issued warrant on an equity, basket of equities or equity index that is eligible to be included in the equity method as a notional position in the underlying equity or equities as follows:

- (a) a purchased call option and a written put option must be treated as a long position; and
- (b) a purchased put option and a written call option must be treated as a short position.

#### **A5.3.19 Netting**

##### **Guidance**

1. Before calculating the Equity Risk Capital Requirement, positions may be netted in order to produce the individual net position.
2. Since the Netting of positions for Equity Risk Capital Requirement purposes does not involve legal or contractual issues, this material appears here rather than in the Netting section of the credit risk chapter.

##### **Netting of identical equities**

**A5.3.20** (1) An Authorised Firm may only net equity positions when:

- (a) long and short (including notional) positions are in the same tranche of the same equity; and
  - (b) long and short (including notional) positions are in different tranches of the same equity where the tranches enjoy the same rights in all respects and become fungible within one hundred and eighty days, and thereafter the equity of one tranche can be delivered in settlement of the equity of the other tranche.
- (2) For the purposes of (1)(a), an equity is the same as another, only if they enjoy the same rights in all respects and are fungible with each other.

**A5.3.21 Calculation of the equity risk capital requirement**

**Guidance**

There are two methods for calculating the Equity Risk Capital Requirement: the standard method and the simplified method. The standard method requires two separate calculations. The first is Specific Risk and the second is General Market Risk. The simplified method is easier to calculate but usually results in a higher capital requirement than the standard method. In addition, Authorised Firms must calculate an Interest Rate Risk Capital Requirement for a forward, a future, an option or a company issued warrant.

- A5.3.22** (1) An Authorised Firm must allocate an equity position or notional position to the country in which the equity is listed.
- (2) An equity listed in more than one country must be allocated to one of the countries in which it is listed.

**A5.3.23** An Authorised Firm must allocate an unlisted equity to the country in which it is issued.

**The concentration test**

**A5.3.24** An Authorised Firm must apply either the standard method or simplified method to an equity position, except that where an individual net position exceeds 20% of the sum of the long and short positions (ignoring the sign) of its country portfolio, the simplified method must be applied to the excess.

**Guidance**

The part of the individual net position that does not exceed 20% may be treated under the simplified or standard method.

**Standard method**

**A5.3.25** The total Equity Risk Capital Requirement is the sum of the Specific Risk requirements for all individual net equity positions and the General Market Risk requirements calculated separately for each country.

**Specific risk**

**A5.3.26** Specific Risk must be calculated for each net position in an individual equity.

- A5.3.27** (1) The Specific Risk of each individual net equity position is its market value (ignoring the sign) multiplied by the appropriate risk percentage in the tables below:
- (2) Specific Risk percentages for a single equity

<b>Risk Percentage (for a single equity)</b>	<b>Risk percentage if the Liquidity and diversity tests in A5.3.28 and A5.3.29 are both satisfied</b>
8%	4%

- (3) Specific Risk percentages for an index

Broad-based indices	All other indices
0%	4%

- (4) For the purposes of (1), a broad-based index means an index listed in Rule A5.3.34.

**Liquidity test**

- A5.3.28** (1) An equity satisfies the Liquidity test if it is a constituent of a high Liquidity equity index.
- (2) An index is a high Liquidity equity index if it is included in the following table:

Australia	All Ords	Japan	Nikkei225
Austria	ATX	Netherlands	EOE25
Belgium	BEL20	Spain	IBEX35
Canada	TSE35	Sweden	OMX
France	CAC40	Switzerland	SMI
Germany	DAX	UK	FTSE100
Hong Kong	Hang Seng	UK	FTSE mid-250
Italy	MIB-30	USA	S&P 500

**Diversity test**

- A5.3.29** A portfolio of equities satisfies the diversity test if:

- (a) no individual equity position comprises more than 10% of the value of the Authorised Firm’s country portfolio; and
- (b) the sum of the long and short positions (ignoring the sign) of equity positions which individually comprise between 5% and 10% of the value of the Authorised Firm’s country portfolio does not exceed 50% of the value of the Authorised Firm’s country portfolio.

- A5.3.30** For the purpose of Rule A5.3.29, the value of the Authorised Firm’s country portfolio is the sum of all long and short (ignoring the sign) equity positions in the Authorised Firm’s country portfolio.

**General market risk**

- A5.3.31** An Authorised Firm must calculate General Market Risk on a country-by-country basis.

- A5.3.32** An Authorised Firm must calculate the General Market Risk for each country in the following way:

- (a) all individual net positions are multiplied by 8%;
- (b) long and short positions in each country portfolio are netted; and

- (c) if the net equity position is negative, the sign must be reversed.

**Simplified method**

**A5.3.33** The Equity Risk Capital Requirement for each country is the sum of the market value of all individual net positions (ignoring the sign) multiplied by the appropriate risk percentage in the table below:

	Percentage risk	
	An Authorised Firm in Category 1 or 5	An Authorised Firm in Category 2
Single equities	16%	12%
Broad-based indices (not broken down into constituent equities)	8%	8%
All other indices (not broken down into constituent equities)	16%	12%

**A5.3.34** For the purposes of Rule A5.3.33, a broad-based index means an index specified in the table under (c) or an index that satisfies the following criteria:

- (a) the index contains at least 20 shares;
- (b) the weighting of the largest company is not greater than 20% of the total index; and
- (c) the weighting of the largest five companies is not greater than 60% of the total index.

Australia	All Ordinaries
Austria	Austrian Traded Index
Belgium	BEL 20
Canada	TSE 35, TSE 100, TSE 300
France	CAC 40, SBF 250
Germany	DAX
European	Dow Jones Stoxx 50 Index, FTSE Eurotop 300, MSCI Euro Index
Hong Kong	Hang Seng
Italy	MIB 30
Japan	Nikkei 225, Nikkei 300, TOPIX
Korea	Kospi
Netherlands	AEX
Singapore	Straits Times Index
Spain	IBEX 35
Sweden	OMX
Switzerland	SMI
UK	FTSE 100, FTSE Mid 250, FTSE All Share
US	S&P 500, Dow Jones Industrial Average, NASDAQ Composite, Russell 2000

## **A5.4 Foreign exchange risk capital requirement**

### **Guidance**

Section A5.4 presents the method for the calculation of Foreign Exchange Risk Capital Requirement for the purpose of Rule 5.6.2(2).

**A5.4.1** An Authorised Firm which calculates its Foreign Exchange Risk Capital Requirement in accordance with Rule 5.6.2(2) must apply the Rules in this section.

**A5.4.2** An Authorised Firm must calculate its Foreign Exchange Risk Capital Requirement by using the standard method as follows:

- (a) calculating its net open position in each currency and in gold;
- (b) calculating its overall net open position in accordance with Rule A5.4.4; and
- (c) multiplying the overall net open position by the percentage provided in Rule A5.4.5.

### **Measuring the net open position in a single currency**

**A5.4.3** An Authorised Firm must calculate its net open position in each currency, and in gold, by summing:

- (a) the net spot position, being all asset items less all liability items, including accrued interest, denominated in the currency in question;
- (b) the net forward position, being 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;
- (c) guarantees and similar instruments that are certain to be called and are likely to be irrecoverable;
- (d) net future income/expenses not yet accrued but already fully hedged, at the discretion of the reporting Authorised Firm; and
- (e) any other item representing a profit or loss in Foreign Currencies.

### **Measuring the overall net open position**

**A5.4.4** (1) An Authorised firm must convert the net position in each Foreign Currency and in gold at spot rates into the reporting currency.

(2) The overall net open position is measured by aggregating:

- (a) the sum of the net short positions or the sum of the net long positions, whichever is the greater; plus
- (b) the net position (short or long) in gold, regardless of sign.

**A5.4.5** The Foreign Exchange Risk Capital Charge is 8% of the overall net open position.

**Guidance**

1. An example of how to calculate the overall net open position is as follows:

YEN	EURO	GB	Saudi Riyal	\$	Gold
+50	+100	+150	-20	-180	-35
<b>TOTAL +300</b>			<b>TOTAL -200</b>		<b>TOTAL 35</b>

2. The Foreign Exchange Risk Capital Charge would be 8% of the higher of either the net long currency positions or the net short currency positions (i.e. 300) plus the net position in gold (35) =  $335 \times 8\% = 26.8$ .
3. Forward currency and gold positions will normally be valued at current spot market exchange rates. Using forward exchange rates would be inappropriate since it would result in the measured positions reflecting to some extent current interest rate differentials. However, an Authorised Firm which bases its normal management accounting on net present values is expected to use the net present values of each position, discounted using current interest rates and valued at current spot rates, for measuring its forward currency and gold positions.

**Treatment of accrued interest and expenses, forwards, and structural positions**

- A5.4.6**
- (1) An Authorised Firm must include interest accrued and accrued expenses as a position.
  - (2) If an Authorised Firm includes future income/expenses it must do so on a consistent basis and not include only those expected future flows that reduce its position.
  - (3) An Authorised Firm must exclude any positions which it has deliberately taken in order to hedge partially or totally against the adverse effect of the exchange rate on its Capital Resources, from the calculation of net open currency positions, if each of the following conditions is met:
    - (a) the positions are of a "structural", i.e., non-dealing, nature;
    - (b) the Authorised Firm has notified the DFSA in writing of its intention to rely upon this Rule; and
    - (c) any exclusion of the position must be applied consistently, with the treatment of the hedge remaining the same for the life of the assets or other items.
  - (4) An Authorised Firm need not include positions related to:
    - (a) items which are deducted from its capital when calculating its Capital Resources, including investments in non-consolidated subsidiaries; or
    - (b) other long-term participations denominated in Foreign Currencies which are reported in the published accounts at historic cost.



## **A5.5 Commodities risk capital requirement**

### **Guidance**

Section A5.5 presents the method for the calculation of Commodities Risk Capital Requirement for the purpose of Rule 5.7.2(b).

**A5.5.1** An Authorised Firm which calculates its Commodities Risk Capital Requirements in accordance with Rule 5.7.2(b) must apply the Rules in this section.

### **Calculation of commodities risk capital requirement**

**A5.5.2** (1) An Authorised Firm must calculate its Commodities Risk Capital Requirement by applying the Maturity Ladder approach in Rule A5.5.5 or the Simplified approach in Rule A5.5.6 to all Non-Trading and Trading Book:

- (a) commodity positions;
- (b) commodity derivatives and off-balance sheet positions that are affected by changes in commodity prices, having derived notional commodity positions; and
- (c) other positions against which no other Market or Credit Risk Capital Requirement has been applied.

(2) An Authorised Firm must determine notional commodity positions by converting the commodity derivatives into notional underlying commodity positions and assigning appropriate maturities in accordance with Rule A5.5.3.

### **Treatment of Commodity derivatives**

**A5.5.3** An Authorised Firm must:

- (a) incorporate all futures and forward contracts relating to individual commodities in the measurement system as notional amounts and assigned a maturity with reference to the expiry date.
- (b) incorporate commodity swaps where one leg is a fixed price and the other the current market price as a series of positions equal to the notional amount of the contract, with one position corresponding to each payment on the swap and slotted into the Maturity Ladder accordingly. The positions will be long positions if the Authorised Firm is paying fixed and receiving floating, and short positions if the Authorised Firm is receiving fixed and paying floating.
- (c) incorporate commodity swaps where the legs are in different commodities in the relevant Maturity Ladder. No offsetting will be allowed in this regard except where the commodities belong to the same sub-category.

- A5.5.4** (1) Subject to (2), an Authorised Firm must not net positions in different commodities for the purpose of calculating open positions.
- (2) An Authorised Firm may net positions in different commodities where those commodities:
- (a) are deliverable against each other; and
  - (b) are in one or more sub-categories of the same category;

**Guidance**

1. For the purposes of Rule A5.5.4, an example of a category is oil. An example of a sub-category is Brent.
2. For the Simplified approach and the Maturity Ladder approach, long and short positions in each commodity may be reported on a net basis for the purposes of calculating open positions.

**Maturity ladder approach**

- A5.5.5** (1) An Authorised Firm which uses the Maturity Ladder approach to calculate the Commodities Risk Capital Requirement must:
- (a) express each commodity position (spot and forward) in terms of the standard unit of measurement and net long and short positions maturing on the same day or maturing within ten business days of each other in the case of contracts traded in markets with daily delivery dates;
  - (b) allocate the positions remaining after taking the steps in (a) to the appropriate maturity band in the following table:

<b>Band</b>	<b>Maturity of Position</b>
1.	0-1 month
2.	1 – 3 months
3.	3 – 6 months
4.	6 – 12 months
5.	1 – 2 years
6.	2 – 3 years
7.	Over 3 years

- (c) calculate the spread charge each time long and short positions are matched within each band. In each instance, the spread charge equals the matched amount multiplied first by the spot price for the commodity and then by a spread rate of 3%;
- (d) calculate a carry charge for each position that is carried across to another maturity band. In each instance, the carry charge equals the carried position multiplied first by the spot price for the commodity, then by the carry rate of 0.6% and finally by the number of bands by which the position is carried;
- (e) repeat (c) if necessary;



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- (f) calculate the outright charge by multiplying all remaining unmatched positions (long plus short, ignoring the sign) by the spot price for the commodity, then by 15%; and
  - (g) sum the totals in (2) – (6) to reach the total requirement.
- (2) For the purposes of (1)(b), an Authorised Firm must:
- (a) allocate physical stocks to the first maturity band; and
  - (b) set a separate Maturity Ladder for each commodity.

**Guidance**

The table below illustrates the calculation of the Commodity Risk Capital Requirement on an individual commodity using the Maturity Ladder approach.

After a firm has carried out the pre-processing required by A5.5.5(1)(a), it follows the steps required by Rule A5.5.5(1)(a) to (g). The spread rate is 3%, the carry rate is 0.6% and the outright rate is 15%. The example assumes that the spot price for the commodity is \$20						
Band	A5.5.5(1)(b)	A5.5.5(1)(c)	A5.5.5(1)(d)	A5.5.5(1)(e)	A5.5.5(1)(f)	
0 ≤ 1 month						
>1 month ≤ 3 months	1100 long 800 short	800 matched				
>3 months ≤ 6 months						
>6 months ≤ 1 year						
>1 year ≤ 2 years	400 short	Nothing matched			400 matched	100 long remains unmatched
>2 years ≤ 3 years						
> 3 years	200 long	Nothing matched				
Spread charges	800x\$20x3%	+	400x \$20x3%	=	\$720	
Carry charges	300x\$20x0.6%x3	+	200x\$20x0.6%x2	=	\$156	
Outright charge	100x\$20x15%			=	<u>\$300</u>	
Total					\$1,176	

### **Simplified approach**

**A5.5.6** An Authorised Firm using the simplified approach to calculate the Commodities Risk Capital Requirement must sum:

- (a) 15% of the net position multiplied by the spot price for the commodity;  
and
- (b) 3% of the gross position (long plus short, ignoring the sign) multiplied by the spot price of the commodity.

## **A5.6 Option risk capital requirement**

### **Guidance**

Section A5.6 presents the method for the calculation of Option Risk Capital Requirement for the purpose of Rule 5.7.2(2)(b).

**A5.6.1** An Authorised Firm which calculates its Option Risk Capital Requirement in accordance with Rule 5.7.2(2)(b) must apply the Rules in this section.

### **Calculation of option risk capital requirement**

- A5.6.2** (1) An Authorised Firm that uses solely purchased options may use the Simplified approach set out in Rule A5.6.3 to calculate its Option Risk Capital Requirement.
- (2) An Authorised Firm which writes options must use the advanced approach known as the Deltaplus method set out in Rule A5.6.5 to calculate its Option Risk Capital Requirement.

### **Guidance**

1. This section sets out how an Authorised Firm that has a Trading Book and has positions in options must assign them to the Trading Book to calculate the Option Risk Capital Requirement.
2. An Authorised Firm should refer to chapter 1 to determine if it has a Trading Book.
3. An Authorised Firm is required to deal with Non-Trading Book positions in options in accordance with Rule 4.3.1.

### Simplified approach

**A5.6.3** An Authorised Firm using the Simplified approach must treat the positions for the options and the associated underlying Instrument, cash or forward, and calculate the capital charge for each position, by reference to the following table:

Position	Treatment
Long cash and long put or short cash and long call.	The capital charge is the market value of the underlying Instrument multiplied by the sum of Specific and General Market Risk percentages for the underlying Instrument less the amount the option is in the money, if any, bounded at zero.
Long call or long put.	The capital charge will be the lesser of: <ul style="list-style-type: none"> <li>• the market value of the underlying Instrument multiplied by the sum of Specific and General Market Risk percentages for the underlying Instrument; or</li> <li>• the market value of the options.</li> </ul>

### Guidance

As an example of how the calculation would work, if a holder of 100 shares currently valued at \$10 each holds an equivalent put option with a strike price of \$11, the capital charge would be:  $\$1,000 \times 16\%$  (i.e., 8% specific plus 8% General Market Risk) = \$160, less the amount the option is in the money  $(\$11 - \$10) \times 100 = \$100$ , i.e., the capital charge would be \$60. A similar methodology applies for options whose underlying Instrument is a Foreign Currency, an interest rate related instrument or a commodity.

- A5.6.4** (1) For the purposes of Rule A5.6.3, the Specific Risk percentage for:
- (a) a currency option is 8%; and
  - (b) an option on commodities is 15%.
- (2) For the purposes of Rule A5.6.3, in the case of an option with a Residual Maturity of more than six months, the strike price must be compared with the forward, not current price, or if the Authorised Firm is unable to do this, then the money amount must be taken to be zero.

## **Delta-plus method**

### **Guidance**

The Delta-plus method uses the sensitivity parameters or “Greek letters” associated with options to measure their Option Risk Capital Requirement. Under this method, the Delta-equivalent position of each option becomes part of the standardised methodology set out in sections 5.4 to 5.7 with the Delta-equivalent amount subject to the applicable General Market Risk Requirements. Separate capital charges are then applied to the Gamma and Vega risks of the option positions.

- A5.6.5** (1) An Authorised Firm that writes or purchases options may include Delta-weighted options positions within the standardised methodology set out in sections 5.2 to 5.5. Such options must be reported as a position equal to the market value of the underlying Instrument multiplied by the Delta.
- (2) An Authorised Firm is also required to measure Gamma (which measures the rate of change of Delta) and Vega (which measures the sensitivity of the value of an option with respect to a change in volatility) risks in order to calculate the total capital charge. These sensitivities will be calculated according to an approved proprietary options pricing model.
- (3) Delta-weighted positions with debt Securities or interest rates as the underlying Instrument must be inserted into the interest rate time bands, as set out in section A5.2. A two-legged approach must be used as for other derivatives, requiring one entry at the time the underlying Instrument takes effect and a second at the time the underlying Instrument matures. Floating rate instruments with caps or floors must be treated as a combination of floating rate Securities and a series of European-style options.
- (4) The capital charge for options with equities as the underlying Instrument must also be based on the Delta-weighted positions which must be incorporated in the measure of Market Risk described in section A5.3. For purposes of this calculation, each national market must be treated as a separate underlying Instrument.
- (5) The capital charge for options on commodities, foreign currency (including gold) positions must be based on the method set out in section 5.8. For Delta risk, the net Delta-based equivalent of the commodities, foreign currency including gold) options must be incorporated into the measurement of the Exposure for the respective currency (or gold) position.
- (6) Individual net Delta positions as described above must be treated as the underlying Instrument in accordance with sections A5.4 to A5.5.

**A5.6.6** In addition to the capital charges referred to in A5.6.5, arising from Delta risk, an Authorised Firm must calculate the Gamma and Vega for each option position, including hedge positions in the following way:

- (a) for each individual option a “Gamma impact” must be calculated as:

$$\text{Gamma impact} = \frac{1}{2} \times \text{Gamma} \times \text{VU}^2$$

where VU = Variation of the underlying Instrument of the option.

- (b) VU must be calculated as follows:
- (i) for interest rate options if the underlying Instrument is a bond, the market value of the underlying Instrument should be multiplied by the risk weights set out in section 5.4 for the underlying Instrument. An equivalent calculation should be carried out where the underlying Instrument is an interest rate, again based on the assumed changes in the corresponding yield in Rule A5.2.16;
  - (ii) for options on equities and equity indices, the market value of the underlying Instrument should be multiplied by 8%;
  - (iii) for foreign exchange and gold options, the market value of the underlying Instrument should be multiplied by 8%; and
  - (iv) for options on commodities, the market value of the underlying Instrument should be multiplied by 15%.
- (c) for the purpose of this calculation the following positions must be treated as the same underlying Instrument:
- (i) for interest rates, each time band as set out in Rule A5.2.16;
  - (ii) for equities and stock indices, each national market; and
  - (iii) for foreign currencies and gold, each currency pair and gold.
- (d) all individual Gamma impacts must be summed, to obtain in a net Gamma for each underlying Instrument that is either positive or negative. Any negative figures must be summed to give the Capital Requirement for the Gamma.

**A5.6.7** The Capital Requirement for Vega risk must be calculated by multiplying the sum of the Vegas for all options on the same underlying Instrument by a proportional shift in volatility of +/- 25% and summing the absolute values of the individual results.

## A5.7 Securities underwriting risk capital requirement

### Guidance

Section A5.7 presents the method for the calculation of Securities Underwriting Risk Capital Requirement for the purpose of Rule 5.9.7(b).

**A5.7.1** An Authorised Firm which calculates its Securities Underwriting Risk Capital Requirement in accordance with Rule 5.9.7(b) must apply the Rules in this section.

**A5.7.2** An Authorised Firm must calculate a net underwriting position from the date of initial commitment until the Underwriting process ends, as the initial gross commitment adjusted for:

- (a) underwriting or sub-underwriting commitments obtained from others since the time of initial commitment;
- (b) purchases or sales of the Securities since the time of initial commitment; and
- (c) any allocation of Securities granted or received, arising from the commitment to underwrite the Securities, since the time of initial commitment.

**A5.7.3** (1) Subject to (2), an Authorised Firm must multiply its net underwriting position by the Specific and General Market Risk Requirements.

- (2) An Authorised Firm may reduce the amount that would otherwise apply by the operation of (1) in respect of net underwriting positions arising from the issue of Securities which are new to the market by reducing the amount by the relevant percentage in the following table:

### Reduction Factors

Underwriting Timeline	Debt Issue		Equity Issue	
	General Market Risk	Specific Risk	General Market Risk	Specific Risk
Date of initial commitment until working day 0	0%	100%	90%	90%
Working day 1	0%	90%	90%	90%
Working day 2	0%	75%	75%	75%



Working day 3	0%	75%	75%	75%
Working day 4	0%	50%	50%	50%
Working day 5	0%	25%	25%	25%
Working day 6 and onwards	0%	0%	0%	0%

- (3) Working day zero is the working day on which the firm becomes unconditionally committed to accepting a known quantity of Securities at an agreed price.
- (4) An Authorised Firm must calculate its Security Underwriting Risk Capital Requirement as the sum of all of its net Underwriting requirements calculated in accordance with (1) and (2).

**Guidance**

The reduction factors shown in the table above should be applied to a net Underwriting position to reduce the position. They are not the proportions of the position used to calculate an equity or interest rate position.

**A5.8 Criteria for use of internally developed market risk models**

**Qualitative criteria**

**Guidance**

1. The DFSA will usually only approve an internal model or its use when the model is in full compliance with the following qualitative criteria:
  - i. the Authorised Firm should have an independent risk control unit that is responsible for the design and implementation of the Authorised Firm's risk management system;
  - ii. the Authorised Firm's risk management system should capture the broad risk factor categories, that is, interest rates, exchange rates (which may include gold), equity prices and commodity prices with related options volatilities being included in each risk factor category;
  - iii. the unit should conduct a regular back-testing programme; the board of directors and senior management should be actively involved in the risk control process and

- should regard risk control as an essential aspect of the business to which significant resources need to be devoted;
- iv. the Authorised Firm's internal risk measurement model should be closely integrated into the day-to-day risk management process of the Authorised Firm;
- v. the risk measurement system should be used in conjunction with internal trading and exposure limits;
- vi. a routine and rigorous programme of stress testing should be in place as a supplement to the risk analysis based on the day-to-day output of the Authorised Firm's risk measurement model;
- vii. the Authorised Firm should have a routine in place for ensuring compliance with a documented set of internal policies, controls and procedures concerning the operation of the risk measurement system; and
- viii. an independent review of the risk measurement system should be carried out regularly in the Authorised Firm's own internal auditing process.

#### **Specification of market risk factors**

- 2. a. A value-at-risk model must capture and accurately reflect, on a continuous basis, all material General Market Risks and, where approval has been granted in relation to Specific Risk, Specific Risks arising on the underlying portfolio, and should ensure that sufficient risk factors are properly specified.
- b. The risk factors contained in a Market Risk measurement system should be sufficient to capture the risks inherent in the Authorised Firm's portfolio of on and off-balance sheet trading positions. Although an Authorised Firm will have some discretion in specifying the risk factors for its internally developed models, the DFSA expects that such models will meet the following in respect of the risk factors:
  - i. for interest rates, there should be a set of risk factors corresponding to interest rates in each currency in which the Authorised Firm has interest-rate-sensitive on or off-balance sheet positions. The risk measurement system will be expected to model the yield curve using one of a number of generally accepted approaches, for example, by estimating forward rates of zero-coupon yields. The risk measurement system should incorporate separate risk factors to capture spread risk, for example, between bonds and swaps;
  - ii. for exchange rates (which may include gold), the risk measurement system will incorporate risk factors corresponding to the individual foreign currencies in which the Authorised Firm's positions are denominated;
  - iii. for equity prices, there will be risk factors corresponding to each of the equity markets in which the Authorised Firm holds significant positions. At a minimum, this will include a risk factor that is designed to capture market-wide movements in equity prices, for example, a market index. Positions in individual Securities or in sector indices could be expressed in "beta-equivalents" relative to this market-wide

index. A somewhat more detailed approach would be to have risk factors corresponding to various sectors of the overall equity market, for instance, industry sectors or cyclical and non-cyclical sectors. The most extensive approach would be to have risk factors corresponding to the volatility of individual equity issues; and

- iv. for commodity prices, there will be risk factors corresponding to each of the commodity markets in which the Authorised Firm holds significant positions. For Authorised Firms with relatively limited positions in commodity-based instruments, a straightforward specification of risk factors would be acceptable. Such a specification would likely entail one risk factor for each commodity price to which the Authorised Firm is exposed. For more active trading, the model should also take account of variation in the "convenience yield" between derivatives positions such as forwards and swaps and cash positions in the commodity.

### **Quantitative standards**

- 3. The DFSA will usually only approve an internal model or its use when the model meets the following quantitative criteria:
  - a. value-at-risk should be computed at least on a daily basis;
  - b. in calculating the value-at-risk, a 99th percentile, one-tailed confidence interval is to be used;
  - c. in calculating value-at-risk, an instantaneous price shock equivalent to a 10 day movement in prices is to be used, i.e., the minimum "holding period" will be 10 trading days;
  - d. the choice of historical observation period, or sample period, for calculating value-at-risk will be constrained to a minimum length of one year;
  - e. an Authorised Firm should update its data set no less frequently than once every three months and should also reassess it whenever market prices are subject to material changes;
  - f. no particular type of model is prescribed. So long as each model used captures all the material risks run by the Authorised Firm, the Authorised Firm will be free to use models based, for example, on variance-covariance matrices, historical simulations, or Monte Carlo simulations;
  - g. an Authorised Firm will have discretion to recognise empirical correlations within broad risk categories, for example, interest rates, exchange rates, equity prices and commodity prices, including related options volatilities in each risk factor category;
  - h. an Authorised Firm's models should accurately capture the unique risks associated with options within each of the broad risk categories; and
  - i. an Authorised Firm must calculate, on a daily basis, its Market Risk Capital Requirement or any component for which an internal model is used, expressed as

the higher of (a) its previous day's value-at-risk number measured according to the parameters specified in this section and (b) an average of the daily value-at-risk measures on each of the preceding sixty business days, multiplied by a multiplication factor.

4. The DFSA will usually set a multiplication factor of 3 that must be used by the Authorised Firm where all the qualitative and quantitative criteria are satisfied. This will be imposed as a condition on the approval and may be varied by the DFSA should circumstances require.

### **A5.8.1 Stress testing**

- (1) For the purposes of Rule 5.3.3, an Authorised Firm's internal model must meet the following criteria:
  - (a) the Authorised Firm's stress scenarios must cover a range of factors that can create extraordinary losses or gains in trading portfolios, or make the control of risk in those portfolios very difficult. These factors include low-probability events in all major types of risks, including the various components of market, credit, and operational risks;
  - (b) the Authorised Firm's stress tests must be both of a quantitative and qualitative nature, incorporating both Market Risk and Liquidity aspects of market disturbances. Quantitative criteria must identify plausible stress scenarios to which the Authorised Firm could be exposed. Qualitative criteria must emphasise that two major goals of stress testing are to evaluate the capacity of the Authorised Firm's capital to absorb potential large losses and to identify steps the Authorised Firm can take to reduce its risk and conserve capital; and
  - (c) the Authorised Firm must combine the use of supervisory stress scenarios with stress tests developed by the Authorised Firm itself to reflect their specific risk characteristics. Information is required in three broad areas:
    - (i) supervisory scenarios requiring no simulations by the Authorised Firm - the Authorised Firm must have information on the largest losses experienced during the reporting period available for supervisory review. This loss information must be compared to the level of capital that results from an Authorised Firm's internal measurement system;
    - (ii) supervisory scenarios requiring a simulation by the Authorised Firm – the Authorised Firm must subject its portfolio to a series of simulated stress scenarios and provide the DFSA with the results (e.g., the sensitivity of

the Authorised Firm's Market Risk Exposure to changes in the assumptions about volatilities and correlations); and

- (iii) scenarios developed by the Authorised Firm itself to capture the specific characteristics of its portfolio.
- (2) In addition to the scenarios prescribed under (i) and (ii) above, an Authorised Firm must also develop its own stress tests which it identifies as most adverse, based on the characteristics of its portfolio, for example, problems arising in a key region of the world combined with a sharp move in oil prices. The Authorised Firm must also provide the DFSA with a description of the methodology used to identify and carry out the scenarios as well as with a description of the results derived from these scenarios.

## APP6 LIQUIDITY

### A6.1 Application for a global liquidity concession

#### Guidance

An application for a global Liquidity concession pursuant to Rule 6.3.2 should comprise:

1. a description of the home supervisor's requirements for managing Liquidity Risk;
2. an explanation of the systems and controls used by the head office to ensure the adequacy of the branch's Liquidity;
3. a written assurance from the Authorised Firm's head office that it will:
  - a. ensure that adequate Liquidity is available at all times to support the branch; and
  - b. in the event of a Liquidity crisis, provide the DFSA with all relevant information on the whole Authorised Firm's Liquidity; and
4. a list of any known constraints on the head office, legal or otherwise, to providing the branch with Liquidity.

### A6.2 Including inflows (assets) and outflows (liabilities) in the time bands

- A6.2.1** (1) Outflows (liabilities) must be included in the Maturity Ladder according to their earliest contractual maturity.
- (2) Contingent liabilities must only be excluded from the Maturity Ladder if there is a likelihood that the conditions necessary to trigger them will not be fulfilled.
- (3) Inflows (assets) must be included in the Maturity Ladder according to their latest contractual maturity, except that:
- (a) undrawn committed standby facilities provided by other banks are included at sight;
  - (b) marketable assets are included at sight, at a discount, and
  - (c) assets which have been pledged as Collateral are excluded from the Maturity Ladder.

### A6.3 Including marketable assets in the maturity ladder

- A6.3.1** (1) Assets which are readily marketable are included in the Maturity Ladder in the sight - 8 days time band, generally at a discount to their recorded value calculated in accordance with (4).
- (2) An asset is regarded as readily marketable if:
- (a) prices are regularly quoted for the asset;
  - (b) the asset is regularly traded;
  - (c) the asset may readily be sold, including by repurchase agreement, either on an exchange, or in a deep and liquid market for payment in cash; and
  - (d) settlement is according to a prescribed timetable rather than a negotiated timetable.
- (3) The DFSA may allow, on a case by case basis, an Authorised Firm to include a longer term asset which is relatively easy to liquidate in the sight 8 days time band.
- (4) The discount factor to be applied to types of marketable assets must be determined by reference to the following table:

	Benchmark discount
<b>Central government debt, Local Authority paper and eligible bank bills (Zone 1 Countries)</b>	
Central government and central government-guaranteed marketable Securities with twelve or fewer months' Residual Maturity, including treasury bills; and eligible Local Authority paper and eligible bank bills.	0%
Other central government, central government-guaranteed and Local Authority marketable debt with five or fewer years' Residual Maturity or at variable rates.	5%
Other central government, central government-guaranteed and Local Authority marketable debt with over five years' Residual Maturity.	10%

<b>Other Securities denominated in freely tradable currencies (Zone 1 Countries)</b>	
Non-government debt Securities which are investment grade, and which have six or fewer months' Residual Maturity.	5%
Non-government debt Securities which are investment grade, and which have five or fewer years' Residual Maturity.	10%
Non-government debt Securities which are investment grade, and which have more than five years' Residual Maturity.	15%
Equities which qualify for a specific risk weight no higher than 4%.	20%
<b>Other central government debt</b>	
Where such debt is actively traded.	20%
Exposures to a central government or a central bank where such exposures are actively traded	20%
Where the issuer is a central government or a central bank and the issue is actively traded but the credit exposure is not to the issuer	40%
Non-government, actively-traded exposures, which are investment grade	60%

- (5) The DFSA may vary the discounts to reflect the conditions of a particular market or institution.



## APP7 REPORTING TO DFSA

**A7.1** Not currently in use

### A7.2 Reporting of group capital adequacy

**A7.2.1** An Authorised Firm must, at the end of each reporting period and at the mid-point of each reporting period, prepare a report on the Financial Group capital adequacy of any Financial Group of which it is a member and in respect of which it is required by Chapter 7 to calculate Financial Group Capital Requirements and Financial Group Capital Resources. This report shall be known as the Financial Group Capital Adequacy Report.

- A7.2.2** (1) The Financial Group Capital Adequacy Report must be filed in writing by the Authorised Firm with the DFSA:
- (a) within four months of the Authorised Firm's reporting date in the case of a report at the end of a reporting period; or
  - (b) within two months of the Authorised Firm's mid-year date in the case of a report at the mid-point of a reporting period.
- (2) The Financial Group Capital Adequacy Report must state:
- (a) the name of the Authorised Firm;
  - (b) the reference date of the report;
  - (c) the name, location and activity of the Parent entity of the Financial Group in respect of which the report is made;
  - (d) the Financial Group Capital Resources, calculated in accordance with Rule 7.3.4;
  - (e) the Financial Group Capital Requirement, calculated in accordance with Rule 7.3.3;
  - (f) the amount of surplus or deficit, expressed as the amount in (d) minus the amount in (e);
  - (g) a list of all Authorised Firms and Financial Institutions in the Financial Group;

- (h) if any Authorised Firm in the Financial Group is itself a Parent, the items referred to in (d), (e) and (f) in respect of the Financial Group headed by that Authorised Firm; and
  - (i) particulars of any Authorised Firm or Financial Institution in the Financial Group in respect of which the capital requirement calculated in accordance with Rule 7.3.3 exceeds its Capital Resources or Adjusted Capital Resources calculated in accordance with Rule 7.3.4(1)(b).
- (3) Amounts in the Financial Group Capital Adequacy Report must be expressed in thousands of dollars.
  - (4) The Financial Group Capital Adequacy Report must be signed by:
    - (a) the Persons specified in Rule 1.6.3(2) in the case of a report at the end of a reporting period; or
    - (b) the Person specified in Rule 1.6.3(3) in the case of a report at the mid-point of a reporting period.
  - (5) A Financial Group Capital Adequacy Report prepared at the end of a reporting period must be accompanied by a statement by the Authorised Firm's auditor, made in writing to the directors of the Authorised Firm and to the DFSA, and stating whether any significant matter has come to the attention of the auditor to indicate that the report has not been properly compiled in accordance with the requirements of this section, from information provided to the Authorised Firm by other members of the Financial Group and from the Authorised Firm's own records.

**Guidance**

- 1. Where information that would be contained in the Financial Group Capital Adequacy Report would be identical with information previously or concurrently provided to the DFSA pursuant to this or another provision of the Rulebook, and that information has not changed, the DFSA will normally accept a statement to that effect in the report in place of that information.
- 2. Form B 280 in PRU may be used by an Authorised Firm to present the Financial Group Capital Adequacy Report. Use of this form is not mandatory, however if the form is used the applicable instructional guidelines in PRU must be observed.