



**Prudential – Investment, Insurance Intermediation and Banking Rules  
(PRU)  
(VER13.181223)**

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## **1 APPLICATION, INTERPRETATION AND CATEGORISATION**

### **1.1 Application**

- 1.1.1** (1) Subject to (2), these Rules apply to every Authorised Person where its Financial Services Permission authorises it to carry on one or more of the Regulated Activities listed in 1.3.1(a), 1.3.2(a), 1.3.3(1)(a), 1.3.4(a), 1.3.5(a), 1.3.6(a) or 1.3.7(a).
- (2) In respect of a Fund Manager that:
- (a) manages only Venture Capital Funds; or
  - (b) (i) manages only Venture Capital Funds; and
    - (ii) undertakes one or both of the Regulated Activities of Advising on Investments or Credit and Arranging Deals in Investments where those activities are restricted to co-investments in assets in which a Venture Capital Fund managed by the Authorised Person has invested or will invest;
- only the requirements under Sections 2.3 and 6.12 apply.
- (3) These Rules apply to an Authorised Person in accordance with both its status as a Domestic Firm or as a Branch and, secondly, its Category as determined under Section 1.3.
- (4) Where a Chapter, Part or Section of these Rules applies to a limited scope of Categories of Authorised Person, the term "Authorised Person" used in those provisions is to be read accordingly.
- (5) These Rules apply to the whole business of an Authorised Person except in relation to Client Assets and Insurance Money that are held or controlled by an Authorised Person which are not included in any prudential calculation.

### **Guidance**

1. The effect of Rule 1.1.1(1) is that these Rules apply to all Authorised Persons, except those that are Insurers, Representative Offices or Credit Rating Agencies. In the case of Insurers, those firms that are authorised to effect or carry out Contracts of Insurance should instead refer to the PIN Rulebook.
2. Rule 1.1.1(2) does not apply to an Authorised Person where its Financial Services Permission authorises it to carry on one or both of the Regulated Activities of Advising on Investments or Credit and Arranging Deals in Investments where those activities are not restricted to co-investments in assets in which a Venture Capital Fund managed by the Authorised Person has invested or will invest.

3. These Rules apply to Authorised Persons classified as Domestic Firms and to those Authorised Persons conducting Regulated Activities through a Branch in ADGM.
4. These Rules reinforce the fitness and propriety requirements for Authorised Persons found in GEN 3 – Management, Systems and Controls and Principle 3. These Rules are comprised of the following:
  - a. an initial Chapter establishing a categorisation of firms for the application of these Rules;
  - b. two general Chapters detailing overall requirements: General Requirements and Capital and Leverage;
  - c. six Chapters detailing specific requirements relating to the following particular risk types: Credit Risk, Market Risk, Operational Risk, interest rate risk in the Non-Trading Book, Group Risk and Liquidity Risk;
  - d. a Chapter imposing processes for risk self-assessment by Authorised Persons and supervisory assessment by the Regulator; and
  - e. a final Chapter imposing public disclosure requirements.
5. With regards to Authorised Persons carrying on Islamic Financial Business, there are additional matters that should be included in their report to the Regulator which are in the Islamic Finance Rulebook (IFR) (see IFR rules).
6. To assist Authorised Persons two tables are provided that set out the application of these Rules to Domestic Firms (Application Table A) and Branches (Application Table B), based on the different Categories of Authorised Persons. These tables are for guidance purposes only.



**APPLICATION TABLE A:  
FOR AN AUTHORISED PERSON THAT OPERATES AS A DOMESTIC FIRM**

Chapter	Category 1	Category 2	Category 3A	Category 3B	Category 3C	Category 4	Category 5
<b>1. Application, Interpretation and Categorisation</b>	Whole Chapter						
<b>2. General Requirements</b>	Whole Chapter						
<b>3. Capital and Leverage</b>	Whole Chapter, except Rule 3.2.2, and Sections 3.6, 3.7 and 3.20.	Whole Chapter, except Rule 3.2.2, and Sections 3.6, 3.7, 3.20 and 3.21.	Whole Chapter, except Rule 3.2.2 and Sections 3.5 and 3.21.				Whole Chapter, except Rule 3.2.2 and Sections 3.6, 3.7 and 3.20.
<b>4. Credit Risk</b>	Whole Chapter						Whole Chapter
<b>5. Market Risk</b>	Whole Chapter	Only Sections 5.1, 5.2 and 5.6					Whole Chapter, except Section 5.4
<b>6. Operational Risk</b>	Whole Chapter, except Section 6.12			Whole Chapter, except Sections 6.10 and 6.11			Whole Chapter, except Section 6.12
<b>7. Interest Rate Risk In the Non-Trading Book</b>	Whole Chapter						

Chapter	Category 1	Category 2	Category 3A	Category 3B	Category 3C	Category 4	Category 5
8. Group Risk	Whole Chapter		Only Sections 8.1 and 8.5				Whole Chapter
9. Liquidity Risk	Whole Chapter, except Rule 9.2.2(3)	Only Rule 9.2.2 (3)					Whole Chapter, except Rule 9.2.2(3)
10. Supervisory Review and Evaluation Process	Whole Chapter			Whole Chapter, except Sections 10.4 and 10.6			Whole Chapter
11. Disclosure Requirements	Whole Chapter						Whole Chapter

**APPLICATION TABLE B:  
FOR AN AUTHORISED PERSON THAT OPERATES AS A BRANCH IN ADGM**

Chapter	Category 1	Category 2	Category 3A	Category 3B	Category 3C	Category 4	Category 5
<b>1. Application, Interpretation and Categorisation</b>	Whole Chapter						
<b>2. General Requirements</b>	Whole Chapter						
<b>3. Capital and Leverage</b>	Only Rule 3.2.2						
<b>4. Credit Risk</b>	Only Sections 4.1 to 4.4 and Rules 4.5.1 to 4.5.7 and 4.5.9						Only Sections 4.1 to 4.4 and Rules 4.5.1 to 4.5.7 and 4.5.9
<b>5. Market Risk</b>	Only Sections 5.1 and 5.2						Only Sections 5.1 and 5.2
<b>6. Operational Risk</b>	Whole Chapter, except Sections 6.11 and 6.12			Whole Chapter, except Sections 6.10 and 6.11			Whole Chapter, except Sections 6.11 and 6.12
<b>7. Interest Rate Risk In the Non-Trading Book</b>	Whole Chapter						

Chapter	Category 1	Category 2	Category 3A	Category 3B	Category 3C	Category 4	Category 5
<b>8. Group Risk</b>	Only Sections 8.1, 8.2 and 8.5		Only Sections 8.1 and 8.5				Only Sections 8.1, 8.2 and 8.5
<b>9. Liquidity Risk</b>	Whole Chapter, except Rule 9.2.2(3), 9.3.12 and 9.3.13	Only Rule 9.2.2 (3)					Whole Chapter, except Rule 9.2.2(3) , 9.3.12 and 9.3.13
<b>10. Supervisory Review and Evaluation Process</b>							
<b>11. Disclosure Requirements</b>							

## 1.2 Glossary

**1.2.1** The following terms and abbreviations bear the following meanings for the purpose of these Rules.

Accepting Deposits	Means the Regulated Activity specified in paragraph 38 of Schedule 1 of the FSMR.
Accounting Records	Means records and underlying documents comprising initial and other accounting entries and associated supporting documents such as: <ul style="list-style-type: none"> <li>(a) cheques;</li> <li>(b) records of electronic fund transfers;</li> <li>(c) invoices;</li> <li>(d) contracts;</li> <li>(e) the general and subsidiary ledgers, journal entries and other adjustments to the financial statements that are not reflected in journal entries; and</li> <li>(f) work sheets and spread sheets supporting cost allocations, computations, reconciliations and disclosures.</li> </ul>
Acting as the Administrator of a Collective Investment Fund	Means the Regulated Activity specified in paragraph of 60..Schedule 1 of the FSMR
Acting as the Trustee of an Investment Trust	Means the Regulated Activity specified in paragraph 61 of Schedule 1 of the FSMR.
Adjusted Capital Resources	Capital resources calculated in accordance with the PIN rules.
Advising on Investments or Credit	Means the Regulated Activity specified in paragraph 28 of Schedule 1 of the FSMR.
ALCO	Asset and Liability Committee.
Alternative Standardised Approach	The manner in which the Operational Risk Capital Requirement is calculated in accordance with Sections 6.11 and A7.3.
Annual Audited Expenditure	The expenditure calculated in accordance with Rule 3.7.2.
Arranging Credit	Means the Regulated Activity specified in paragraph 50 of Schedule 1 of the FSMR.

Arranging Custody	Means the Regulated Activity specified in paragraph 46 of Schedule 1 of the FSMR.
Arranging Deals in Investments	Means the Regulated Activity specified in paragraph 16 of Schedule 1 of the FSMR.
ASF	Available Stable Funding.
Asset-Backed Commercial Paper (ABCP) Programme	A programme that predominantly issues commercial paper with an Original Maturity of one year or less that is backed by assets or other Exposures held in a bankruptcy-remote SPE.
Associate	<p>(1) Means, in respect of a Person 'A' holding Shares or entitled to exercise, or control the exercise of voting power, in an Authorised Person or a Holding Company of an Authorised Person:</p> <ul style="list-style-type: none"> <li>(a) the spouse of A;</li> <li>(b) a child or stepchild of A;</li> <li>(c) the trustee of any settlement, including an disposition or arrangement under which property is held on trust or subject to a comparable obligation, under which A has a life interest in possession;</li> <li>(d) an Undertaking of which A is a Director;</li> <li>(e) a Person who is an Employee or Partner of A;</li> <li>(f) where A is an Undertaking: <ul style="list-style-type: none"> <li>(i) a Director of A;</li> <li>(ii) a Subsidiary or wholly-owned Subsidiary of A; or</li> <li>(iii) a Director or Employee of such a Subsidiary or wholly-owned Subsidiary; or</li> </ul> </li> <li>(g) a Person who has an agreement or arrangement with A with respect to the acquisition, holding or disposal of Shares or other interests in the Authorised Person or the Holding Company of an Authorised Person or under which they undertake to act together in exercising their voting power in relation to an Authorised Person or the Holding Company of an Authorised Person or that other Person.</li> </ul>

	<p>(2) Means in respect of a Person 'A', any Person, including an affiliated company which is:</p> <p>(a) an Undertaking in the same Group as A; or</p> <p>(b) any other Person whose business or domestic relationship with A or its Associate might reasonably be expected to give rise to a community of interest between them which may involve a conflict of interest in dealings with third parties.</p>
AT1	Additional Tier 1.
AT1 Capital	Has the meaning given in Section 3.11.
Auditor	<p>A Partnership or Company that is registered by the Regulator to provide audit services to:</p> <p>(a) an Authorised Person or Recognised Body that is a Domestic Firm;</p> <p>(b) a Domestic Fund; or</p> <p>(c) a Public Listed Company.</p>
Authorised Person	A Person, other than a Recognised Body, who holds a Financial Services Permission.
Available Stable Funding	The amount calculated in accordance with Rule A10.4.8.
Bank	Means a Credit Institution.
Base Capital Requirement	Has the meaning given in Section 3.3.
Basic Indicator Approach	The manner in which the Operational Risk Capital Requirement is calculated in accordance with Sections 6.11 and A7.1.
BCBS	The Basel Committee on Banking Supervision.
Body Corporate	Any body corporate, and a body corporate constituted under the law of a country or territory outside of ADGM.
Branch	<p>Means a place of business within ADGM:</p> <p>(a) which has no separate legal personality;</p> <p>(b) forms a legally dependant part of an Authorised Person whose principal</p>

	<p>place of business and head office is in a jurisdiction other than ADGM; and</p> <p>(c) through which the Authorised Person carries on Regulated Activities in or from ADGM.</p>
By Way of Business	<p>A Person carries on an activity specified in these Rules by way of business only if he carries on that activity from a permanent place of business maintained by him in ADGM and:</p> <p>(a) engages in that activity in a manner which constitutes the carrying on of a business by him;</p> <p>(b) holds himself out as willing and able to engage in that activity; or</p> <p>(c) regularly solicits other Persons to engage with him in transactions constituting that activity.</p>
Capital Conservation Buffer	Means the capital buffer requirements as applied in Section 3.17.
Capital Requirement	The minimum amount of Capital Resources that an Authorised Person must hold, calculated in accordance with Section 3.4 or 3.6, as applicable.
Capital Resources	The total Capital Resources of an Authorised Person calculated in accordance with Section 3.15.
Carrying Out Contracts of Insurance as Principal	Means the Regulated Activity specified in paragraph 32 of Schedule 1 of the FSMR.
Carrying Value	<p>In relation to:</p> <p>(a) a liability or equity instrument the amount at which the liability or equity instrument is recorded before the application of any regulatory deductions, filters or other adjustments, as determined in accordance with the International Financial Reporting Standards; or</p> <p>(b) an asset the amount at which the asset is recorded, net of specific allowances, as determined in accordance with the International Financial Reporting Standards.</p>



Category	A prudential grouping of Authorised Persons which determines the application of these Rules.
CCF	Credit conversion factor.
CCP	Means a central counterparty.
CEA	Credit equivalent amount.
Central Bank	The Central Bank of the UAE.
Certificate	<p>Certificate is an instrument:</p> <ul style="list-style-type: none"> <li>(a) which confers on the holder contractual or property rights to or in respect of a Share, Debenture, Unit or Warrant held by a Person; and</li> <li>(b) the transfer of which may be effected by the holder without the consent of that other Person;</li> </ul> <p>but excludes rights under an Option.</p>
CET1	Common Equity Tier 1.
CET1 Capital	Has the meaning given in Section 3.10.
Clean-Up Call	An Option that permits the SE Exposures (e.g. asset-backed Securities) to be called before all of the underlying Exposures or SE Exposures have been repaid. In the case of Traditional Securitisations, this is generally accomplished by repurchasing the remaining SE Exposures once the pool balance or outstanding Securities have fallen below some specified level. In the case of a synthetic Exposure, the Clean-Up Call may take the form of a clause that extinguishes the credit protection.
Client	A Retail Client, Professional Client or Market Counterparty.
Client Assets	Means Client Money and Client Investments.
Client Investments	Means all Investments held or controlled by an Authorised Person on behalf of a Client in the course of, or in connection with the carrying on of Investment Business.
Client Money	Means money of any currency which an Authorised Person holds on behalf of a Client (including any receivables of the Authorised Person in respect of bank accounts or clearing or brokerage accounts)

	or which an Authorised Person treats as Client Money, subject to the exclusions in COBS 14.2.6.
CLN	Credit-linked note.
Close Links	<p>A Person (Person A) has Close Links with a Person (Person B) if:</p> <ul style="list-style-type: none"> <li>(a) Person B: <ul style="list-style-type: none"> <li>(i) is a Holding Company of Person A;</li> <li>(ii) is a Subsidiary of Person A;</li> <li>(iii) is a Holding Company of the Subsidiary of Person A;</li> <li>(iv) is a Subsidiary of a Holding Company of Person A; or</li> <li>(v) owns and controls 20% or more of the voting rights or Shares of Person A; or</li> </ul> </li> <li>(b) Person A owns and controls 20% or more of the voting rights or Shares of Person B.</li> </ul>
Close Relative	<p>In relation to any individual:</p> <ul style="list-style-type: none"> <li>(a) his spouse;</li> <li>(b) his children and step-children, his parents and step-parents, his brothers and sisters and his step-brothers and step-sisters; and</li> <li>(c) the spouse of any individual within (b).</li> </ul>
Closely Related	Has the meaning given in Rule A4.11.5.
Collateral	Means a Client Investment which has been paid for in full by a Client and which is held or controlled by the Authorised Person under the terms of a deposit, pledge, charge or other security arrangement.
Collective Investment Fund	Means an arrangement falling within section 106 of FSMR and which is not excluded under FUNDS Chapter 2.
Collective Investment Fund Risk Capital Requirement	A component of the Market Risk Capital Requirement calculated in accordance with Section 5.9.
Combined Buffer	Has the meaning given in Rule 3.19.1.

Combined Buffer Requirement	The CET1 Capital required to satisfy the conditions for the Combined Buffer.
Commodities Risk Capital Requirement	A component of the Market Risk Capital Requirement to cover the risk of holding or taking positions in commodities, including precious metals, but excluding gold, calculated in accordance with Section 5.7.
Connected	<p>In relation to a Person (A), a Person which has or has at any relevant time had the following relationship to A:</p> <ul style="list-style-type: none"> <li>(a) a member of A's Group;</li> <li>(b) a Controller of A;</li> <li>(c) a member of a Partnership of which A is a member;</li> <li>(d) an Employee or former Employee of A;</li> <li>(e) if A is a Company: <ul style="list-style-type: none"> <li>(i) an officer or manager of A or of a Parent of A;</li> <li>(ii) an agent of A or of a Parent of A;</li> </ul> </li> <li>(f) if A is a Partnership is or has been a member, manager or agent of A; or</li> <li>(g) if A is an unincorporated association of Persons which is not a Partnership, is or has been an officer, manager or agent of A.</li> </ul>
Connected Counterparty	<p>For the purposes of Large Exposures, and in relation to a Person to which the Authorised Person has an Exposure, a Connected Counterparty means another Person to whom the Authorised Person has an Exposure and who fulfils one or more of the following conditions:</p> <ul style="list-style-type: none"> <li>(a) it is Connected to the first Person;</li> <li>(b) it is an Associate of the first Person;</li> <li>(c) the same Persons significantly influence the Governing Body of each of them; or</li> <li>(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.</li> </ul>

Constitution	<p>Means in relation to a Fund:</p> <ul style="list-style-type: none"> <li>(a) which is in the form of a Body Corporate, the instrument of incorporation;</li> <li>(b) which is in the form of an Investment Trust, the trust deed;</li> <li>(c) which is in the form of a Partnership, the partnership deed; or</li> <li>(d) adopting a form other than one specified in paragraphs (a) to (c) of this definition, an instrument creating the legal form of the Fund to which the Fund Manager is a party setting out provisions relating to any aspect of the operation or management of the Fund.</li> </ul>
Controlled Early Amortisation	Early Amortisation that meets the conditions in Rule 4.14.58.
Countercyclical Capital Buffer	Means the capital buffer requirements as applied in Section 3.18.
Counterparty	Means any Person with or for whom an Authorised Person carries on, or intends to carry on, any regulated business or associated business. In this context, Counterparty includes an individual, unincorporated body, company, government, local authority or other public body.
Counterparty Risk	The risk that an Authorised Person's Counterparty does not perform its obligations under the terms of a contract.
CR Exposure	The Exposure value or amount arising from a Credit Risk Exposure.
CRA	Credit Rating Agency.
CRCOM	Credit Risk Capital Requirement.
Credit Derivative	Any contract which transfers the Credit Risk of a reference obligation or set of reference obligations from the protection buyer to the protection seller, such that the protection seller has an Exposure to the reference obligation(s).
Credit Enhancement	A contractual arrangement in which the Authorised Person retains or assumes an SE Exposure and, in substance, provides some degree of added protection to other parties to the transaction.

Credit Facility	Any facility which includes any arrangement or agreement which extends monetary credit whether funded or unfunded to a Person including but not limited to any loan or syndicated loan, mortgage, overdraft, financial lease, letter of credit, financial guarantee, trade finance, transaction finance, project finance or asset finance.
Credit Institution	Means:  (a) an undertaking whose business is to receive Deposits or other repayable funds from the public and to grant Credits for its own account; or  (b) an Electronic Money Institution.
Credit Quality Grade	A credit quality step in a credit quality assessment scale. A credit quality assessment scale is a scale onto which the credit assessments of an ECAI or an expert credit agency are mapped.
Credit Rating Agency	A Person carrying on in or from ADGM the Regulated Activity of Operating a Credit Rating Agency for which it has an authorisation under its Financial Services Permission.
Credit Risk	Means, in relation to an Authorised Person, the risk of loss if another party fails to perform on its financial obligation to the Authorised Person.
Credit Risk Capital Requirement	The credit risk capital requirement calculated in accordance with Section 4.6.
Credit-Enhancing Interest-Only Strip	An on-balance sheet asset that:  (a) represents a valuation of cash flows related to future margin income; and  (b) is subordinated.
Credit Valuation Adjustment	Has the meaning given in App5.
CRM	Credit risk mitigation.
CRW	Credit risk weight for an Exposure.
CV	Contracted value for delivery.
CVA	Credit Valuation Adjustment.
CVA Risk Capital Requirement	Means the requirement calculated in accordance with App5.

Dealing in Investments as Agent	Means the Regulated Activity specified in paragraph 12 of Schedule 1 of the FSMR.
Dealing in Investments as Principal	Means the Regulated Activity specified in paragraph 4 of Schedule 1 of the FSMR.
Debenture	<p>Means an instrument creating or acknowledging indebtedness, whether secured or not, but excludes:</p> <ul style="list-style-type: none"> <li>(a) an instrument creating or acknowledging indebtedness for, or for Money borrowed to defray, the consideration payable under a contract for the supply of goods or services;</li> <li>(b) a cheque or other bill of exchange, a banker's draft or a letter of credit (but not a bill of exchange accepted by a banker);</li> <li>(c) a banknote, a statement showing a balance on a bank account, or a lease or other disposition of property; and</li> <li>(d) a Contract of Insurance.</li> </ul>
Delta	The measure of an Option's sensitivity to a change in value of the underlying Investment, asset or property.
Deposit	<p>(1) Means a sum of Money paid on terms:</p> <ul style="list-style-type: none"> <li>(a) under which it will be repaid, with or without interest or a premium, and either on demand or at a time or in circumstances agreed by or on behalf of the Person making the payment and the Person receiving it; and</li> <li>(b) which is not referable to the provision of property (other than currency) or services or the giving of security.</li> </ul> <p>(2) In (1) Money is paid on terms which are referable to the provision of property or services or the giving of security if:</p> <ul style="list-style-type: none"> <li>(a) it is paid by way of advance or part payment under a contract for the sale, hire or other provision of property or services, and is repayable only in the event that the property or services are</li> </ul>

	<p>not in fact sold, hired or otherwise provided;</p> <p>(b) it is paid by way of security for the performance of a contract or by way of security in respect of loss which may result from the non-performance of a contract; or</p> <p>(c) without prejudice to (b), it is paid by way of security for the delivery up of property, whether in a particular state of repair or otherwise.</p> <p>(3) A sum is not a Deposit if it is paid:</p> <p>(a) by a Person in the course of carrying on a business consisting wholly or to a significant extent of lending Money;</p> <p>(b) by one company to another at a time when both are members of the same Group;</p> <p>(c) by an Authorised Person authorised under its Financial Services Permission to carry on the following Regulated Activities:</p> <p>(i) Accepting Deposits;</p> <p>(ii) Effecting Contracts of Insurance; or</p> <p>(iii) Carrying Out Contracts of Insurance as Principal; or</p> <p>(d) by a Person who is a Close Relative of the Person receiving it or who is a Director, manager or Controller of that Person.</p> <p>(4) A sum is not a Deposit if it is received:</p> <p>(a) by a lawyer acting in his professional capacity;</p> <p>(b) by an accountant acting in his professional capacity;</p> <p>(c) by an Authorised Person or a Recognised Body authorised under its Financial Services Permission to carry on any one or more of the following Regulated Activities:</p>
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	<ul style="list-style-type: none"> <li>(i) Dealing in Investments as Principal;</li> <li>(ii) Dealing in Investments as Agent;</li> <li>(iii) Arranging Credit;</li> <li>(iv) Arranging Deals in Investments;</li> <li>(v) Managing Assets;</li> <li>(vi) Operating a Collective Investment Fund;</li> <li>(vii) Effecting Contracts of Insurance;</li> <li>(viii) Carrying Out Contracts of Insurance as Principal;</li> <li>(ix) Insurance Intermediation;</li> <li>(x) Insurance Management; or</li> <li>(xi) Managing a Profit Sharing Investment Account,</li> </ul> <p>in the course of or for the purpose of any such Regulated Activity disregarding any applicable exclusions in the GEN rules; or</p> <p>(d) by a Person as consideration for the issue by him of a Debenture.</p>
Derivative or Derivative Contract	Means Specified Investments falling within paragraphs 94 to 96 of Schedule 1 of FSMR or, so far as relevant to such investments, any investment falling within paragraph 98 or 99 of that Schedule.
Director	<ul style="list-style-type: none"> <li>(1) In relation to an Undertaking established under the Companies Regulations, a Person who appears on the Register of Directors maintained by the Registrar of Companies; and</li> <li>(2) in relation to all other Undertakings, a Person who has been admitted to a register which has a corresponding meaning to the Register of Directors or performs the function of acting in the capacity of a Director, by whatever name called.</li> </ul>
Displaced Commercial Risk Capital Requirement	The requirement calculated in accordance with the IFR rules.
Domestic Firm	<p>An Authorised Person or Recognised Body which:</p> <ul style="list-style-type: none"> <li>(a) has its registered and head office in ADGM; or</li> </ul>



	(b) if it is a Subsidiary of an Undertaking whose principal place of business and head office is in a jurisdiction other than ADGM, has its registered office in ADGM.
Domestic Fund	A Fund established or domiciled in the ADGM.
Duration Method	A measure of General Market Risk calculated in accordance with Rule A6.2.19.
DvP	Delivery versus Payment.
E	An Exposure value or amount.
E*	An Exposure value or amount adjusted in the manner provided in the relevant Rule.
EAD	Exposure at default
EAE	The Exposure value or amount for an Early Amortisation Exposure.
Early Amortisation	A mechanism that, once triggered, allows investors to be paid out prior to the originally stated maturity of the amortisation provision will be considered either controlled or non-controlled.
ECAI	A CRA or an external credit rating agency approved by the Regulator for the purpose of these Rules.
Effecting Contracts of Insurance	Means the Regulated Activity specified in paragraph 31 of Schedule 1 of the FSMR.
Employee	Means an individual: <ul style="list-style-type: none"> <li>(a) who is employed or appointed by a Person in connection with that Person's business, whether under a contract of service or for services or otherwise; or</li> <li>(b) whose services, under an arrangement between that Person and a third party, are placed at the disposal and under the control of that Person.</li> </ul>
EPRS	Electronic Prudential Reporting System
Equity Risk Capital Requirement	A component of Market Risk Capital Requirement and calculated in accordance with Section 5.5.
Evergreening	Evergreening refers to the practice by some banks to roll over or renew their non-performing loans or potentially non-performing loans, so that they can avoid recognising them as non-performing loans in

	their accounts and consequently avoid provisioning for them.
Excess Spread	Gross finance charge collections and other income received by the trust or SPE minus certificate interest, servicing fees, charge-offs, and other senior trust or SPE expenses.
Expenditure Based Capital Minimum	A Capital Requirement calculated in accordance with Section 3.7.
Exposure	<p>(1) The maximum loss that an Authorised Person (and where applicable its PSIA holders) might suffer if:</p> <ul style="list-style-type: none"> <li>(a) a Counterparty or a group of Connected Counterparties fail to meet their obligations; or</li> <li>(b) it realises assets or off-balance sheet positions.</li> </ul> <p>(2) An Exposure also includes any asset or off-balance sheet item, which could result in a potential loss to the Authorised Person due to Market Risk or Operational Risk or any other risk factor.</p>
FCCA	Financial Collateral Comprehensive Approach as described in Rule 4.9.5.
FCSA	Financial Collateral Simplified Approach as described in Rule 4.9.5.
Financial Group	<p>A group of entities which includes an Authorised Person and:</p> <ul style="list-style-type: none"> <li>(a) any Parent incorporated in ADGM;</li> <li>(b) any Financial Institution subsidiaries (whether direct or indirect) of the Parent or Parents in (a) or of the Authorised Person;</li> <li>(c) any Financial Institution in which the Parent or Parents in (a), the Financial Institution subsidiaries in (b) or the Authorised Person (whether direct or indirect) hold 20% or more of the voting rights or capital; and</li> <li>(d) any entity which the Regulator directs the Authorised Person to include in accordance with Rule 8.1.3.</li> </ul>

Financial Group Capital Resources	The Capital Resources of a Financial Group calculated in accordance with Rule 8.3.4.
Financial Institution	Means: <ul style="list-style-type: none"> <li>(a) an Authorised Person; or</li> <li>(b) any Person which carries out as its principal business an activity which would, if carried out in ADGM, be a Regulated Activity; and</li> <li>(c) is not one of the following: <ul style="list-style-type: none"> <li>(i) a governmental organisation, including the central bank of any State; or</li> <li>(ii) a multilateral development bank.</li> </ul> </li> </ul>
Financial Instrument	Any contract that gives rise to both a financial asset of one entity and a financial liability or equity instrument of another entity.
Financial Product	Means an Investment, a Credit Facility, a Deposit, a Profit Sharing Investment Account, or a Contract of Insurance.
Financial Services Permission	A permission given, or having effect as if so given, by the Regulator in accordance with Part 4 of the Financial Services and Markets Regulations.
First Loss Position	Represents the first level of support provided to the Special Purpose Entity or vehicle that should bear all, or a significant part of, the risk associated with the items held by the Special Purpose Entity or vehicle.
Foreign Exchange Risk Capital Requirement	A component of the Market Risk Capital Requirement and as calculated in accordance with Section 5.6.
Fund	Means a Collective Investment Fund.
Fund Manager	Means a Person responsible for the management of the property held for or within a Fund and who otherwise operates the Fund.
Fund Property	The property held for or within a Fund.
Future	Means an instrument comprising rights under a contract: <ul style="list-style-type: none"> <li>(a) for the sale of a commodity or property of any other description under which delivery is to be made at a future date</li> </ul>

	<p>and at a price agreed on when the contract is made and that contract:</p> <ul style="list-style-type: none"> <li>(i) is made or traded on a regulated exchange;</li> <li>(ii) is made or traded on terms that are similar to those made or traded on a regulated exchange; or</li> <li>(iii) would, on reasonable grounds, be regarded as made for investment and not for commercial purposes; or</li> </ul> <p>(b) where the value of the contract is ultimately determined by reference, wholly or in part, to fluctuations in:</p> <ul style="list-style-type: none"> <li>(i) the value or price of property of any description; or</li> <li>(ii) an index, interest rate, exchange rate, any combination of these, or other factor designated for that purpose in the contract; and</li> </ul> <p>which is wholly settled by cash or set-off between the parties but excludes:</p> <ul style="list-style-type: none"> <li>(iii) rights under a contract where one or more of the parties takes delivery of any property to which the contract relates;</li> <li>(iv) a contract under which Money is received by way of Deposit or an acknowledgement of a debt on terms that any return to be paid on the sum deposited or received will be calculated by reference to an index, interest rate, exchange rate or any combination of these or other factors; or</li> <li>(v) a Contract of Insurance.</li> </ul>
Gamma	The measure of the rate of change of Delta.
General Market Risk	<p>(1) For the purposes of the Interest Rate Risk Capital Requirement, means the risk that losses may arise from price changes in Securities caused by parallel or non-parallel shifts in the yield curve or from price movements in the equity market for a given country;</p>

	<p>(2) For the purposes of the Equity Risk Capital Requirement, means the risk that losses may arise from a price movement in the equity market for a given country; or</p> <p>(3) For the purposes of internal models, means both of the above risks.</p>
Governing Body	The board of Directors, Partners, committee of management or other Governing Body of an Undertaking.
Group	Has the meaning given in section 258 of FSMR.
Group Risk	The risk of loss to the Authorised Person as a result of its membership of, or linkages within a Group.
High Quality Liquid Assets (HQLA)	Liquid assets that meet the conditions in Rules A10.2.2 to A10.2.9 of App10.
Holding Company	Has the meaning given in the Companies Regulations.
Home State Regulator	Means the relevant Regulated Activities regulator of a Branch in its home member state.
ICR	Means the Individual Capital Requirement given in Section 10.6.
Implicit Support	Arises when an Authorised Person provides support to a securitisation in excess of its predetermined contractual obligation.
Insurance Intermediation	Means the Regulated Activity specified in paragraph 33 of Schedule 1 of the FSMR.
Insurance Management	Means the Regulated Activity specified in paragraph 36 of Schedule 1 of the FSMR.
Insurance Manager	An Authorised Person whose Financial Services Permission authorises it to carry on the Regulated Activity of Insurance Management.
Insurance Money	<p>(1) Means, subject to (2), any monies arising from Insurance Intermediation or the Insurance Management business which are any of the following:</p> <p>(a) premiums, additional premiums and return premiums of all kinds;</p> <p>(b) claims and other payments due under Contracts of Insurance;</p>

	<ul style="list-style-type: none"> <li>(c) refunds and salvages;</li> <li>(d) fees, charges, taxes and similar fiscal levies relating to Contracts of Insurance;</li> <li>(e) discounts, commissions and brokerage; or</li> <li>(f) monies received from or on behalf of a Client of an Insurance Manager, in relation to his Insurance Management business.</li> </ul> <p>(2) Monies are not Insurance Monies where there is a written agreement in place between the Insurance Intermediary or Insurance Manager and the Insurer to whom the relevant monies are to be paid (or from whom they have been received) under which the Insurer agrees that:</p> <ul style="list-style-type: none"> <li>(a) the Insurance Intermediary or Insurance Manager, as the case may be, holds as agent for the Insurer all monies received by it in connection with Contracts of Insurance effected or to be effected by the Insurer;</li> <li>(b) insurance cover is maintained for the Client once the monies are received by the Insurance Intermediary or the Insurance Manager, as the case may be; and</li> <li>(c) the Insurer's obligation to make a payment to the Client is not discharged until actual receipt of the relevant monies by the Client.</li> </ul> <p>(3) In this definition, a Client of an Insurance Manager means:</p> <ul style="list-style-type: none"> <li>(a) any Insurer for which the Insurance Manager provides Insurance Management;</li> <li>(b) any shareholder of an Insurer mentioned in (a); or</li> <li>(c) any Person on whose behalf the Insurance Manager undertakes to establish that Person as an Insurer.</li> </ul>
<b>Insurer</b>	A Person carrying on in the ADGM either or both of the following Regulated Activities for which it has

	<p>authorisation under its Financial Services Permission:</p> <ul style="list-style-type: none"> <li>(a) Effecting Contracts of Insurance; or</li> <li>(b) Carrying Out Contracts of Insurance as Principal.</li> </ul>
Interest Rate Risk Capital Requirement	A component of Market Risk Capital Requirement and calculated in accordance with Section 5.4.
Internal Capital Adequacy Assessment Process (ICAAP)	The internal capital adequacy assessment process prescribed in Chapter 10.
Internal Risk Assessment Process (IRAP)	The internal risk assessment process prescribed in Section 10.3.
International Financial Reporting Standards	Means the International Financial Reporting Standards as issued and amended from time to time by the International Accounting Standards Board.
Investment	<ul style="list-style-type: none"> <li>(1) Means either a Security or Derivative.</li> <li>(2) Such Security or Derivative includes: <ul style="list-style-type: none"> <li>(a) a right or interest in the relevant Security or Derivative; and</li> <li>(b) any instrument declared as a Security or Derivative by the GEN rules.</li> </ul> </li> </ul>
Investment Business	<p>The business of:</p> <ul style="list-style-type: none"> <li>(a) Dealing in Investments as Principal;</li> <li>(b) Dealing in Investments as Agent;</li> <li>(c) Arranging Credit;</li> <li>(d) Arranging Deals in Investments;</li> <li>(e) Managing Assets;</li> <li>(f) Advising on Investments or Credit;</li> <li>(g) Operating a Collective Investment Fund;</li> <li>(h) Providing Custody;</li> <li>(i) Arranging Custody;</li> </ul>

	<p>(j) Managing a Profit Sharing Investment Account; or</p> <p>(k) Acting as the Trustee of an Investment Trust.</p>
Investment Grade	A credit rating which maps to a Credit Quality Grade of 1, 2 or 3.
Investment Risk Reserve	Represents the amount that is appropriated out of the income of investment account holders, after allocating the Mudarib's share, in order to meet future losses attributable to investment account holders.
Investment Trust	Means an express trust created solely for collective investment purposes under section 114 of FSMR.
Islamic Contracts	Any contract designed to comply with Shari'a.
Islamic Financial Business	Any part of the financial business of an Authorised Person or Recognised Body which is carried out in accordance with Shari'a.
Islamic Financial Institution	An Authorised Person or Recognised Body which has, on its Financial Services Permission, an endorsement authorising it to conduct its entire financial business in accordance with Shari'a.
Issuer	<p>In relation to:</p> <p>(a) any Security other than a Unit in a Collective Investment Fund, means the Person by whom it is or is to be issued;</p> <p>(b) a Unit in a Collective Investment Fund, means the Fund Manager; and</p> <p>(c) an interest in a Limited Liability Partnership, means the Partnership.</p>
Large Exposure	An Exposure aggregated across an Authorised Person's Non-Trading Book and Trading Book to a Counterparty, a group of Connected Counterparties or a group of Closely Related Counterparties that equals or exceeds 10% of the Authorised Person's Capital Resources.
LCR Requirement	The LCR required to be maintained by an Authorised Person under Rule 9.3.4.
Leverage Ratio	The amount expressed as a percentage value that is calculated in accordance with Rule 3.21.



Liquidity Coverage Ratio (LCR)	The amount expressed as a percentage value that is calculated in accordance with Rule 9.3.4 and section A10.2 of App10.
Liquidity Mismatch Approach	For the purposes of liquidity, an assessment of the short-term liquidity of an Authorised Person.
Liquidity Risk	The risk that an Authorised Person, although solvent, either does not have available sufficient financial resources to enable it to meet its obligations as they fall due, or can secure such resources only at excessive cost.
Managing a Collective Investment Fund	Means the Regulated Activity specified in paragraph 59 of Schedule 1 of the FSMR.
Managing a Profit Sharing Investment Account	Means the Regulated Activity specified in paragraph 64(2) of Schedule 1 of the FSMR.
Managing Assets	Means the Regulated Activity specified in paragraph 56 of Schedule 1 of the FSMR.
Market Counterparty	<p>(1) An Authorised Person may treat a Professional Client referred to in part (2) of the definition of Professional Client as a Market Counterparty provided that the firm:</p> <ul style="list-style-type: none"> <li>(a) in the case of a Professional Client referred to in part (2)(a) to (f) of the definition of Professional Client, has given to that Client a prior written notification of the classification as a Market Counterparty and that Client has not requested to be treated otherwise; and</li> <li>(b) in the case of a Professional Client referred to in part (2)(g), (h), or (i) of the definition of Professional Client, has obtained the prior written consent of that Client to be treated as a Market Counterparty.</li> </ul> <p>(2) The notification and consent referred to in (1) may be given in respect of all services or in respect of each individual transaction.</p> <p>(3) The notification in (1)(a) need only be given to one of:</p> <ul style="list-style-type: none"> <li>(a) a Fund or its Fund Manager; or</li> </ul>

	(b) a pension fund or its management company.
Market Risk	The risk of loss that arises from fluctuations in the values of assets or in interest or exchange rates.
Market Risk Capital Requirement	The requirement calculated in accordance with Rule 5.3.1.
Matched Principal	Has the meaning described in Rule 1.3.3(2).
Maturity Ladder	A table that ordinarily ranks the maturity time bands and assets and liabilities within them.
Maturity Method	This is an advanced approach that an Authorised Person may use to measure the risk of holding or taking positions in debt Securities and other interest rate-related instruments, calculated in accordance with Rule A6.2.17.
Maturity Mismatch	For the purposes of credit risk mitigation, a difference between the maturity of an asset and that of the corresponding liability.
MDB	Multilateral development bank.
Minority interests	Capital invested in a Subsidiary that is owned by other shareholders from outside the Financial Group.
Modified Duration	The time period calculation for the purposes of the Duration Method in accordance with Rule A6.2.21.
Money	Any form of money, including cheques and other payable orders.
Multilateral Trading Facility (MTF)	Means a system which brings together multiple third party buying and selling interests in Investments, in accordance with its non-discretionary rules, in a way that results in a contract in respect of such Investments.
MV	Market value.
Net Stable Funding Ratio	The amount of Available Stable Funding relative to the amount of Required Stable Funding.
Netting	A process by which the claims and obligations between two Counterparties are offset against each other to leave a single net sum.
Non-QCCP	Means a CCP that is not a QCCP.

Non-Trading Book	Describes positions, Exposures and on-and off-balance sheet items, which are not in the Trading Book.
NSFR	Net Stable Funding Ratio.
Operating a Collective Investment Fund	<p>(1) Means:</p> <p>(a) being legally accountable to the Unitholders in the Fund for the management of the property held for or within a Fund under the Fund's Constitution; and</p> <p>(b) establishing, managing or otherwise operating or winding up a Collective Investment Fund.</p> <p>(2) To the extent that any activity under (1) constitutes Managing Assets, Acting as the Administrator of a Collective Investment Fund, Dealing in Investments as Agent, Dealing in Investments as Principal, Arranging Credit, Arranging Deals in Investments, or Providing Custody, such a Regulated Activity is taken to be incorporated within Managing a Collective Investment Fund.</p> <p>(3) The Person referred to in (1) is a Fund Manager.</p>
Operating a Multilateral Trading Facility or Organised Trading Facility	Means the Regulated Activity specified in paragraph 54 of Schedule 1 of the FSMR.
Operational Risk	<p>(1) Refers to the risk of incurring losses due to the failure of systems, processes, and personnel, whether internal or external to the Authorised Person, to perform expected tasks.</p> <p>(2) Operational Risk losses also include losses arising out of legal risk.</p>
Operational Risk Capital Requirement	The requirement calculated in accordance with Section 6.11.
Option	<p>An Option is an instrument that confers on the holder, upon exercise, rights of the kind referred to in any of the following:</p> <p>(a) a right to acquire or dispose of:</p>

	<ul style="list-style-type: none"> <li>(i) a Security (other than a Warrant) or contractually based Investment;</li> <li>(ii) currency of any country or territory; or</li> <li>(iii) a commodity of any kind;</li> </ul> <p>(b) a right to receive a cash settlement, the value of which is determined by reference to:</p> <ul style="list-style-type: none"> <li>(i) the value or price of an index, interest rate or exchange rate; or</li> <li>(ii) any other rate or variable; or</li> </ul> <p>(c) a right to acquire or dispose of another Option under (a) or (b).</p>
Option Risk Capital Requirement	A component of the Market Risk Capital Requirement and calculated in accordance with Section 5.8.
Organised Trading Facility (OTF)	Means a system which brings together multiple third party buying and selling interests in Investments, in accordance with its discretionary rules, in a way that results in a contract in respect of such Investments.
Original Maturity	<p>(1) The time period between the date an offer is made and the date it expires or lapses.</p> <p>(2) In relation to Debentures, the interval between its issue date and the date on which it becomes due and payable.</p>
Originator	<p>(1) An entity which, either itself or through related entities, directly or indirectly, creates the Exposure being securitised; or</p> <p>(2) any entity which purchases or advises or causes an SPE to purchase the Exposures of a third party, which are then used in a securitisation (for avoidance of doubt, selling credit protection such that the entity or the SPE has a long position in the Credit Risk of the obligor is equivalent to purchasing Exposures).</p> <p>(3) Where an entity lends to an SPE with a view to enabling that SPE to make loans which are then used in a securitisation, the entity will generally be deemed to be acting as an Originator.</p>

OTC Derivative or OTC Derivative Contract	Means a Derivative Contract the execution of which does not take place on a Recognised Investment Exchange.
Parent	Means a Holding Company as defined in section 1015 of the Companies Regulations 2015.
Partner	In relation to an Undertaking which is a Partnership, a Person occupying the position of a Partner, by whatever name called.
Partnership	Means any partnership, including a partnership constituted under the law of a country, jurisdiction or territory outside the ADGM, but not including a Limited Liability Partnership.
Person	A Person includes any natural person, Body Corporate or body unincorporated, including a legal person, company, Partnership, unincorporated association, government or state.
PII	Professional indemnity insurance.
Potential Future Credit Exposure (PFCE)	An amount calculated by multiplying the nominal principal amount of an OTC Derivative contract by a specified percentage dependent on the nature and residual maturity of the contract.
Private Equity Fund	A Fund is a Private Equity Fund if it; <ul style="list-style-type: none"> <li>(a) invests in unlisted companies, by means of Shares, convertible debt or other instruments carrying equity participation rights or reward; or</li> <li>(b) participates in management buy-outs or buy-ins.</li> </ul>
Profit Equalisation Reserve	Represents the amount appropriated out of the Mudaraba income, before allocating the Mudarib's share, in order to maintain a certain level of investment returns for investment account holders and to increase owners' equity.
Profit Sharing Investment Account (PSIA)	An account or portfolio managed: <ul style="list-style-type: none"> <li>(a) in relation to property of any kind, including the currency of any country or territory, held for or within the account or portfolio;</li> <li>(b) in accordance with Shari'a and held out as such; and</li> </ul>

	<p>(c) under the term of an agreement whereby:</p> <p>(i) the investor agrees to share any profit with the manager of the account or portfolio in accordance with a predetermined specified percentage or ratio; and</p> <p>(ii) the investor agrees that he alone will bear any losses in the absence of negligence or breach of contract.</p>
Providing Credit	Means the Regulated Activity specified in paragraph 48 of Schedule 1 of the FSMR.
Providing Custody	Means the Regulated Activity specified in paragraph 43 of Schedule 1 of the FSMR.
Providing Money Services	Means the Regulated Activity specified in paragraph 52 of Schedule 1 of the FSMR.
PSE	Public sector enterprise.
Public Listed Company	Has the meaning given in the Companies Regulations.
QCCP	<p>Means an entity, deemed a qualifying central counterparty, that is licensed to operate as a CCP (including a licence granted by way of confirming an exemption), and is permitted by the appropriate regulator/overseer to operate as such. This is subject to the CCP being based and prudentially supervised in a jurisdiction where the relevant regulator/overseer has established, and publicly indicated that it applies to the central counterparty on an ongoing basis, domestic rules and regulations that are consistent with the CPSS-IOSCO Principles for Financial Market Infrastructures.</p> <p>The Regulator may, at its sole discretion, determine that a CCP that is established in a jurisdiction that does not apply the CPSS-IOSCO Principles for Financial Market Infrastructures qualifies as a QCCP.</p>
Qualifying Holding	Any holding in the capital of a non-financial Undertaking of which the Authorised Person is a Controller.
Recognised Body	Means a Recognised Investment Exchange or a Recognised Clearing House.

Recognised Clearing House	Means a clearing house which provides Clearing Services in the ADGM in relation to which a recognition order is in force under Part 12 of FSMR.
Recognised Investment Exchange	Means an investment exchange in relation to which a recognition order is in force under Part 12 of FSMR.
Regulated Activity	<p>An activity constitutes a Regulated Activity under these Rules where:</p> <p>(1) It is one of the activities below:</p> <ul style="list-style-type: none"> <li>(a) Accepting Deposits;</li> <li>(b) Providing Credit;</li> <li>(c) Providing Money Services;</li> <li>(d) Dealing in Investments as Principal;</li> <li>(e) Dealing in Investments as Agent;</li> <li>(f) Arranging Credit;</li> <li>(g) Arranging Deals in Investments;</li> <li>(h) Managing Assets;</li> <li>(i) Advising on Investments or Credit;</li> <li>(j) Managing a Collective Investment Fund;</li> <li>(k) Providing Custody;</li> <li>(l) Arranging Custody;</li> <li>(m) Effecting Contracts of Insurance;</li> <li>(n) Carrying Out Contracts of Insurance as Principal;</li> <li>(o) Insurance Intermediation;</li> <li>(p) Insurance Management;</li> <li>(q) Managing a Profit Sharing Investment Account;</li> <li>(r) Acting as the Administrator of a Collective Investment Fund;</li> <li>(s) Acting as the Trustee of an Investment Trust;</li> </ul>

	<p>(t) Operating a Representative Office;</p> <p>(u) Operating a Credit Rating Agency;</p> <p>(v) Administering a Specified Benchmark;</p> <p>(w) Operating a Multilateral Trading Facility or Organised Trading Facility;</p> <p>(x) Providing Information in Relation to a Specified Benchmark; and</p> <p>(y) Shari'a-compliant Regulated Activities; and</p> <p>(2) Such activity prescribed in (1) is carried on By Way of Business.</p>
Regulator	Means the regulator of Regulated Activities in ADGM.
Related Person	Has the meaning given in Rule 4.4.6.
Relevant Entity	Means any of the following: <p>(a) a Financial Institution; or</p> <p>(b) a financial Holding Company.</p>
Representative Office	A Person carrying on in the ADGM the Regulated Activity of Operating a Representative Office for which it has authorisation under its Financial Services Permission.
Required Stable Funding	The amount calculated in accordance with Rule A10.4.9.
Re-securitisation	Has the meaning given in Section 4.14.
Re-securitisation Exposure	Has the meaning given in Section 4.14.2(c).
Restricted PSIA (PSIAr)	A PSIA in respect of the investment account holder imposes certain restrictions as to where, how and for what purpose his funds are to be invested.
Retail Client	Means a Client specified under COBS 2.3.
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.



Rho	The measure of an Option's sensitivity to a change in interest rates.
Risk Capital Requirement	Has the meaning given in Section 3.5.
Risk Exposure Amount	Has the meaning given in Rule 3.5.8.
RSF	Required Stable Funding.
RWAs	Risk-weighted assets.
SE Exposure	The Exposure value or amount for a securitisation Exposure.
Securities Underwriting Capital Requirement	A component of the Market Risk Capital Requirement defined in Section 5.10.
Security	For the purposes of these Rules, a Security is: <ul style="list-style-type: none"> <li>(a) a Share;</li> <li>(b) a Debenture;</li> <li>(c) a Warrant;</li> <li>(d) a Certificate;</li> <li>(e) a Unit;</li> <li>(f) a Structured Product; or</li> <li>(g) a Derivative.</li> </ul>
Servicer	A Person that administers the securitised items.
SFT	Securities Financing Transactions, such as repo, reverse repo, security lending and borrowing, and margin lending transactions.
Share	Means a share or stock in the capital of any Body Corporate or any unincorporated body but excludes: <ul style="list-style-type: none"> <li>(a) an instrument creating or acknowledging indebtedness for, or for Money borrowed to defray, the consideration payable under a contract for the supply of goods or services;</li> <li>(b) a cheque or other bill of exchange, a banker's draft or a letter of credit (but not a bill of exchange accepted by a banker);</li> </ul>

	<p>(c) a banknote, a statement showing a balance on a bank account, or a lease or other disposition of property; and</p> <p>(d) any Contract of Insurance.</p>
Shari'a-compliant Regulated Activities	Means the Regulated Activities specified in paragraph 64 of Schedule 1 of the FSMR.
Simplified Approach	An alternative application of the provisions of Chapter 4 for an Authorised Person in Category 2 or 3A, as described in Sections 4.7 and A4.12.
Special Purpose Entity (SPE)	A corporation, trust, or other entity organised for a specific purpose, the activities of which are limited to those appropriate to accomplish the purpose of the SPE, and the structure of which is intended to isolate the SPE from the Credit Risk of an Originator or seller of Exposures. SPEs are commonly used as financing vehicles in which Exposures are sold to a trust or similar entity in exchange for cash or other assets funded by debt issued by the trust.
Specific Risk	The risk that losses on an Authorised Person's net long or short position in an individual equity or Security may arise from a negative or positive price movement of that equity or Security relative to the relevant market generally.
Sponsor	An Authorised Person that repackages third party assets directly into a securitisation scheme. Where an Authorised Person 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.
Standardised Approach	The manner in which the Operational Risk Capital Requirement is calculated in accordance with Sections 6.11 and A7.2.
Structured Product	<p>Means an instrument comprising rights under a contract where:</p> <p>(a) the gain or loss of each party to the contract is ultimately determined by reference to the fluctuations in the value or price of property of any description, an index, interest rate, exchange rate or a combination of any of these as specified for that purpose in the contract ("the underlying factor") and is not leveraged upon such fluctuations;</p>

	<p>(b) the gain or loss of each party is wholly settled by cash or set-off between the parties;</p> <p>(c) each party is not exposed to any contingent liabilities to any other Counterparty; and</p> <p>(d) there is readily available public information in relation to the underlying factor;</p> <p>but excludes any rights under an instrument:</p> <p>(e) where one or more of the parties takes delivery of any property to which the contract relates;</p> <p>(f) which is a Debenture; or</p> <p>(g) which is a Contract of Insurance.</p>
Subsidiary	Has the meaning given to the term in the Companies Regulations.
Supervisory Review and Evaluation Process (SREP)	The supervisory review and evaluation process prescribed in Chapter 10.
Synthetic Securitisation	Has the meaning given in Rule 4.14.2(b).
T	Trade date, which is the date on which a transaction is entered into.
T1	Tier 1.
T1 Capital	Has the meaning given in Rule 3.9.1.
T2	Tier 2.
T2 Capital	Has the meaning given in Rule 3.12.1.
Theta	The ratio of the change in an Option price to the decrease in time to expiration. Theta can also be referred to as time decay.
Total Return Swap	A contract under which two parties exchange their positive or negative returns on a notional amount of a reference asset for a specified period of time.
Total Risk Exposure Amount	Has the meaning given in Rule 3.5.7.

Trade Exposure	Means a current exposure, including a variation margin due to the clearing member or to the Client, but not yet received, and any potential future exposure of a clearing member or a Client to a CCP arising from Derivatives, SFTs or long settlement transactions, as well as initial margin.
Trading Book	The positions and Exposures including on and off-balance sheet items eligible for inclusion in the Trading Book, as described in Section 2.2.
Traditional Securitisation	Has the meaning given in Rule 4.14.2(a).
Trust Administration Services	<p>The provision of Trust Administration Services include:</p> <ul style="list-style-type: none"> <li>(a) the keeping of Accounting Records relating to an express trust and the preparation of trust accounts;</li> <li>(b) the preparation of trust instruments or other documents relating to an express trust;</li> <li>(c) the management and administration of trust assets subject to an express trust;</li> <li>(d) dealing with trust assets subject to an express trust, including the investment, transfer and disposal of such assets;</li> <li>(e) the distribution of trust assets subject to an express trust; and</li> <li>(f) the payment of expenses or remuneration out of an express trust.</li> </ul>
Trust Deed	A deed entered into by a Fund Manager and the Trustee to create an Investment Trust.
Trustee	Means the Person, described under FUNDS 12.3.4 who is appointed under a Trust Deed as the trustee of an Investment Trust to hold the Investment Trust's Property on trust for the Unitholders and to oversee the operation of the Investment Trust and, in relation to a Domestic Fund, is authorised under its Financial Services Permission to Act as the Trustee of the Investment Trust.
Undertaking	<p>Means:</p> <ul style="list-style-type: none"> <li>(a) a Body Corporate or Partnership; or</li> </ul>

	(b) an unincorporated association carrying on a trade or business, with or without a view to profit.
Underwriting	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 at a given price, if no other party has purchased or acquired them.
Unit	Means a unit in or a Share representing the rights or interests of a Unitholder in a Fund.
Unitholder	Means any holder of a Unit in the Fund or of any right or interest in such a Unit, otherwise known as a 'participant' and whose name is entered on the Fund's register in relation to that Unit.
Unrestricted PSIA (PSIAu)	A PSIA in respect of which the investment account holder authorises the Authorised Person to invest the account holder's funds in a manner which the Authorised Person deems appropriate without laying down any restrictions as to where, how and for what purpose the funds should be invested.
Unsettled Transaction	A transaction where delivery of an instrument is due to take place against the receipt of cash but remains outstanding.
VaR	Value at risk.
Vega	The measure of the sensitivity of the value of the Option to a change in the volatility of the underlying asset.
Venture Capital Fund	Has the meaning given in FUNDS 4.1.6.
Walkaway Clause	A provision which permits a non-defaulting party to make payments, or no payments at all, to the estate of the defaulter, even if the defaulter is a net creditor.
Warrant	Means an instrument that confers on the holder a right entitling the holder to an unissued Share, Debenture or Unit.

## 1.3 Categories of Authorised Persons

### Guidance

1. In these Rules, Authorised Persons are assigned to "**Categories**" to create a clear framework for determining the provisions of PRU applying to each Authorised Person. The Rules in this Section enable an Authorised Person to determine into which Category it falls.
2. The table in A1.1 of App1 sets out the categorisation process diagrammatically. In that table, an emboldened box indicates the Regulated Activity that is determinative of the Category into which an Authorised Person falls. An Authorised Person may, if authorised under its Financial Services Permission to do so, conduct any number of Regulated Activities specified under any lower Category than the one that applies to the Authorised Person in accordance with this Section. (For this purpose Category 5 is considered to be equivalent to Category 1.) For example, a Category 1 firm could conduct any one or more of the Regulated Activities specified under Categories 2, 3A, 3B, 3C or 4 (if authorised to do so). However, a Category 4 firm may only conduct the Regulated Activities listed under Category 4, given that is the Category for which it is authorised.

### Category 1

#### 1.3.1 An Authorised Person is in Category 1 if:

- (a) its Financial Services Permission authorises it to carry on one or more of the Regulated Activities of Accepting Deposits or Managing a Profit Sharing Investment Account which is a PSIAu; and
- (b) it does not meet the criteria of Category 5.

### Guidance

A Category 1 Authorised Person may be authorised to conduct other Regulated Activities, but it is the authorisation for Accepting Deposits or Managing a Profit Sharing Investment Account which is a PSIAu that is determinative of its belonging to Category 1.

### Category 2

### Guidance

1. A Category 2 Authorised Person may be authorised to conduct other Regulated Activities, but it is the authorisation for Dealing in Investments as Principal (not only as a Matched Principal) or Providing Credit, and the absence of authorisation for the activities specified in Rule 1.3.1, that are determinative of its belonging to Category 2.
2. Where the dealing activities of a firm are limited to acting only as Matched Principal, the activities fall in the scope of Category 3A in accordance with Rule 1.3.3(1). A definition of "Matched Principal" is in Rule 1.3.3(2).

#### 1.3.2 An Authorised Person is in Category 2 if:

- (a) its Financial Services Permission authorises it to carry on one or both of the Regulated Activities of Providing Credit or Dealing in Investments as Principal (not as Matched Principal);
- (b) its dealing activities are not limited in scope as provided in Rule 1.3.3(1)(a)(i); and
- (c) it does not meet the criteria of Categories 1 or 5.

### **Category 3A**

#### **Guidance**

A Category 3A Authorised Person may be authorised to conduct other Regulated Activities, but it is the authorisation for Dealing in Investments as Agent 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 3A. Provided that an Authorised Person carries out the Regulated Activity of Dealing in Investments as Agent in a manner that is wholly incidental to the activity of Managing an Investment Fund or Managing Assets, the Authorised Person shall be regarded as falling within Category 3C.

- 1.3.3** (1) An Authorised Person is in Category 3A if:
- (a) its Financial Services Permission authorises it to carry on one or more of the Regulated Activities of:
    - (i) Dealing in Investments as Principal (where it does so only as a Matched Principal); or
    - (ii) Dealing in Investments as Agent; and
  - (b) it does not meet the criteria of Categories 1, 2 or 5.
- (2) For the purposes of these Rules, an Authorised Person 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 1 Capital Resources; and
  - (d) the positions are incidental in nature and are strictly limited to the time reasonably required to carry out a transaction of that nature.

### **Category 3B**

- 1.3.4** An Authorised Person is in Category 3B if:
- (a) its Financial Services Permission authorises it to carry on one or more of the Regulated Activities of:
    - (i) Providing Custody (where it does so for a Fund); or

- (ii) Acting as the Trustee of an Investment Trust; and
- (b) it does not meet the criteria of Categories 1, 2, 3A or 5.

**Guidance**

A Category 3B Authorised Person may be authorised to conduct other Regulated Activities, but it is the authorisation for Providing Custody for a Fund or Acting as Trustee of a Fund, and the absence of authorisation for the activities specified in Rules 1.3.1, 1.3.2 and 1.3.3 that are determinative of its belonging to Category 3B.

**Category 3C**

**1.3.5** An Authorised Person is in Category 3C if:

- (a) its Financial Services Permission authorises it to carry on one or more of the Regulated Activities of:
  - (i) Managing Assets;
  - (ii) Managing a Collective Investment Fund;
  - (iii) Providing Custody (where it does so other than for a Fund);
  - (iv) Managing a Profit Sharing Investment Account which is a PSIAr;
  - (v) Providing Trust Services (where it is acting as trustee in respect of at least one express trust); or
  - (vi) Providing Money Services; and
- (b) it does not meet the criteria of Categories 1, 2, 3A, 3B or 5.

**Guidance**

A Category 3C Authorised Person may be authorised to conduct other Regulated Activities, but it is the authorisation for Managing Assets, Managing a Collective Investment Fund, Providing Custody other than for a Fund or Managing a Profit Sharing Investment Account which is a PSIAr, Providing Trust Services (where it is acting as a trustee in respect of at least one express trust) or Providing Money Services, and the absence of authorisation for the activities specified in Rules 1.3.1, 1.3.2, 1.3.3 and 1.3.4 that are determinative of its belonging to Category 3C.

**Category 4**

**1.3.6** An Authorised Person is in Category 4 if:

- (a) its Financial Services Permission authorises it to carry on one or more of the Regulated Activities of Arranging Credit, Arranging Deals in Investments, Advising on Investments or Credit, Arranging Custody, Insurance Intermediation, Providing Trust Services (where it is not acting as trustee in respect of an express trust), Insurance Management, Acting as the Administrator of a Collective Investment Fund, Operating a Multilateral Trading Facility or Organised Trading Facility, Operating a Private Financing Platform or Providing Third Party Services; and



- (b) it does not meet the criteria of Categories 1, 2, 3A, 3B, 3C or 5.

### **Guidance**

An Authorised Person in Category 4 may not be authorised to conduct any other Regulated Activity beyond those listed in Rule 1.3.6(a); if it were so authorised it would belong to another Category.

### **Category 5**

- 1.3.7** An Authorised Person is in Category 5 if it:

- (a) is an Islamic Financial Institution; and
- (b) Manages a Profit Sharing Investment Account which is a PSIAu.

- 1.3.8** Authorised Persons which carry out Regulated Activities other than and in addition to Islamic Financial Business will be required to comply with the relevant capital requirements which apply to those Regulated Activities.

### **Guidance**

Authorised Persons in Categories 1 to 4 may also carry out Islamic Financial Business, but only those Authorised Persons in Categories 1 or 5 may Manage a Profit Sharing Investment Account which is a PSIAu. 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 which is a PSIAu, carry on Islamic Financial Business or carry out Shari'a-compliant Regulated Activities.

## **2 GENERAL REQUIREMENTS**

### **Introduction**

#### **Guidance**

This Chapter details the threshold conditions for the mandatory maintenance of a Trading Book, periodic prudential reporting requirements to the Regulator, and guidance on prudent valuation practices. App2 includes detailed Rules on the positions to be included in the Trading Book, the valuation of such positions, prudent valuation practices and associated issues related to the identification and treatment of Trading Book positions. App2 also specifies the Regulator's expectations with regard to the need for a documented Trading Book policy and risk management systems and controls for the Trading Book. App2 also presents in a tabulated format, detailed specifications on periodic prudential reporting requirements for different categories of Authorised Persons.

### **2.1 Application**

- 2.1.1** This Chapter applies to an Authorised Person in any Category.

### **2.2 Trading Book**

- 2.2.1** An Authorised Person must have a Trading Book if:

- (a) it has positions that must be included in a Trading Book in accordance with Section A2.1 of App2;
- (b) those positions are held with trading intent in accordance with Rule A2.1.5; 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 12 month period.

**2.2.2** An Authorised Person that must have a Trading Book in accordance with Rule 2.2.1 must:

- (a) comply with the requirements of Section A2.1 of App2; and
- (b) differentiate its business between Trading Book activity and Non-Trading Book activity on a consistent basis.

**2.2.3** An Authorised Person 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 reflects the intent of the Authorised Person 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.

## **2.3 Reporting**

**2.3.1** (1) An Authorised Person must comply with the accounting and prudential reporting requirements set out in this Chapter and PRU which apply to it.

(2) The Regulator may impose additional reporting requirements on an Authorised Person.

**2.3.2** An Authorised Person must, subject to Rule 2.3.3:

- (a) prepare its returns in accordance with the Rules in this Chapter, the instructional guidelines in PRU and elsewhere, and the requirements of the Electronic Prudential Reporting System (EPRS) of the Regulator including the frequency of submission detailed therein; and
- (b) submit the returns to the Regulator using EPRS.

**Guidance**

The returns and instructional guidelines are provided in these Rules and EPRS.

- 2.3.3** The Regulator may by way of a written notice direct an Authorised Person to submit its returns in a form, manner or frequency other than as prescribed in Rule 2.3.2. An Authorised Person must continue to submit its returns in accordance with this direction until the Regulator by way of written notice directs otherwise.
- 2.3.4** (1) In relation to an annual return the form must be certified through EPRS by the SEO, a Director or a Partner of the Authorised Person.
- (2) In relation to a quarterly or a monthly return the form must be certified through EPRS by an Officer of the Authorised Person which has previously been identified by the Authorised Person as having the authority to provide the certification for that purpose.
- 2.3.5** If the Regulator notifies an Authorised Person, or the Authorised Person itself forms the view, that a return that has been submitted to the Regulator appears to be inaccurate or incomplete, the Authorised Person must consider the matter and within a reasonable time it must correct any inaccuracies and make good any omissions, and re-submit the relevant parts of the return.
- 2.3.6** (1) An Authorised Person must use the appropriate forms set out in EPRS for the preparation and submission of returns which are required under these Rules.
- (2) All returns must be completed in dollars (\$).
- 2.3.7** (1) An Authorised Person must submit to the Regulator annual returns, within four months of the end of the financial year of the Authorised Person.
- (2) An Authorised Person must submit to the Regulator quarterly returns, in the applicable format prescribed by the Regulator, within one month of the end of the reporting period to which the return relates.
- (3) An Authorised Person must submit to the Regulator monthly returns, in the applicable format prescribed by the Regulator, within fifteen days of the end of the reporting period to which the return relates.
- 2.3.8** (1) When a return which is required under these Rules is submitted after the due date, such non-submission incurs an administrative fee as prescribed in the FEES Rulebook.
- (2) Nothing in this Rule limits the right of the Regulator to take any other action.

**Guidance**

If a return is not submitted by the date on which it becomes due, the Person is in breach of a Rule and the Regulator is entitled to take action including, but not limited to, taking steps to withdraw authorisation to conduct Regulated Activities.

**2.4 Prudent valuation practices**

**Guidance**

1. This Section and related Section A2.5 in App2 provide Authorised Persons with Guidance on prudent valuation for positions that are accounted for at fair value, whether they are in the Trading Book or in the Non-Trading Book (also known as the banking book).
2. A framework for prudent valuation practices should at a minimum include adequate systems and controls and valuation methodologies. The Regulator's expectations in this regard are set out in Section A2.5 in App2.
3. The Guidance is especially important for positions without actual market prices or observable inputs to valuation, as well as less liquid positions which raise supervisory concerns about prudent valuation. The Guidance is not intended to require Authorised Persons to change valuation procedures for financial reporting purposes.
4. The Regulator will assess an Authorised Person's valuation procedures for consistency with the Guidance. The Regulator may impose a valuation adjustment if there is a material degree of inconsistency between the Authorised Person's valuation procedures and the Guidance.

## **3 CAPITAL AND LEVERAGE**

### **Guidance**

1. This Chapter deals with all aspects of prudential requirements relating to the capital adequacy of Authorised Persons, in terms of both quantity and quality, and, where appropriate, the maintenance of liquid assets. (Chapter 9 covers more generally the related prudential topic of liquidity, the ability of an Authorised Person to meet its financial obligations as they fall due.) The Chapter outlines the minimum capital requirements that an Authorised Person should meet, consistent with Pillar 1 of the Basel Accord, and aims to ensure that an Authorised Person maintains adequate capital resources to support the risks associated with its activities and that it can fully absorb unexpected losses at any time. A summary of the minimum capital requirements is given in App 3.2.
2. This Chapter also includes provisions forming part of the framework for the assessment by the Regulator, under Pillar 2 of the Basel Accord, of the capital adequacy of an Authorised Person, with further detail given in Chapter 10. The disclosure requirements placed upon an Authorised Person under Pillar 3 of the Basel Accord are covered in Chapter 11.
3. Part 1 of this Chapter sets out the application provisions. Part 2 of this Chapter outlines the fundamental capital adequacy obligations and the systems and controls requirements to ensure compliance with this critical regulatory obligation. Part 3 of this Chapter and the related App4 include the Rules and associated guidance for the calculation of minimum Capital Requirement for different Categories of Authorised Persons. Additionally, this Part also includes requirements for the maintenance of liquid assets by firms subject to the Expenditure Based Capital Minimum. Part 4 of this Chapter specifies detailed Rules on the calculation of Capital Resources of an Authorised Person, including detailed Rules on the eligibility criteria for different components of Capital Resources which correspond to varying levels of quality. This part also specifies the requirements in respect of the Capital Conservation Buffer and associated obligations.
4. App3 provides guidance on various aspects of stress and scenario testing which are to be considered by an Authorised Person to assist it in complying effectively with the Rules in this Chapter.

### **PART 1– Application**

#### **3.1 Application**

- 3.1.1** The Parts, Sections and Rules in this Chapter apply to an Authorised Person as stated in those provisions.

### **Guidance**

1. Part 2 (Basic Requirements) of this Chapter imposes a number of basic requirements, including the following core requirements:
  - a. for an Authorised Person in Category 1, 2, 3A or 5, the components of its Capital Resources should at all times equal or exceed the thresholds specified in Section 3.16; and

- b. for an Authorised Person in Category 3B, 3C or 4, its Capital Resources should at all times equal or exceed the amount of its Capital Requirement.
- 2. In particular, note that:
  - a. Part 3 (Calculating Capital Requirements) applies to all firms, but with differentiated calculations for the Capital Requirement for the various Categories of Authorised Persons, as prescribed in Sections 3.4 and 3.6;
  - b. Part 4 (Calculating Capital Resources) applies to all firms; and
  - c. within Part 4, an exemption from the calculation of T2 Capital in relation to firms authorised to Manage a Profit Sharing Investment Account which is a PSIAu is prescribed in Rule 3.12.9.

## **PART 2– Basic Requirements**

### **3.2 Application**

**3.2.1** In this Section the Rules apply to an Authorised Person in any Category as follows:

- (a) Rule 3.2.2 applies to an Authorised Person operating as a Branch; and
- (b) Rules 3.2.3 to 3.2.5 apply to an Authorised Person operating as a Domestic Firm.

#### **Branches – general requirements**

**3.2.2** An Authorised Person that is a Branch must:

- (a) ensure that it has and maintains, at all times, liquid assets and access to financial resources which are adequate in relation to the nature, size and complexity of its business both as to amount and quality to ensure that there is no significant risk that liabilities cannot be met as they fall due;
- (b) ensure that it complies at all times with its Home State Regulator's prudential requirements;
- (c) submit to the Regulator a copy of every capital adequacy summary report and Leverage Ratio report submitted to its Home State Regulator within ten business days of the due date for submission to that regulator; and
- (d) in the event of any anticipated or actual breach of any prudential requirements set by its Home State Regulator, notify the Regulator immediately with any relevant documents.

#### **Domestic Firms – adequate capital resources**

**3.2.3** An Authorised Person that is a Domestic Firm must have, at all times, Capital Resources which equal or exceed the amount of its Capital Requirement.

**Guidance**

The specific Capital Requirements for the various Categories of Authorised Persons that are Domestic Firms are dealt with in Sections 3.4 and 3.6.

**Domestic Firms – maintaining capital resources**

**3.2.4** An Authorised Person that is a Domestic Firm must:

- (a) have and maintain, at all times, Capital Resources of the types and amounts specified in, and calculated in accordance with, these Rules;
- (b) ensure that it maintains capital and liquid assets 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**

- 1. These Rules do not prevent Authorised Persons from holding Capital Resources in excess of or applying stricter measures than required by these Rules.
- 2. For the purposes of Rule 3.2.4, an Authorised Person's Governing Body should assess whether the Capital Resources which are required by the Regulator as set out in these Rules are adequate in relation to the Authorised Person's specific business model and risk profile. Additional resources should be maintained by the Authorised Person where its Governing Body has considered that the required Capital Resources do not adequately reflect the nature and risks of the Authorised Person's business.
- 3. The liabilities referred to in Rule 3.2.4(b) include an Authorised Person's contingent and prospective liabilities, such as liabilities arising from a change in business strategy or claims made against the Authorised Person, but not liabilities that might arise from prospective transactions which the Authorised Person could avoid, for example by ceasing its operations. Liabilities from prospective transactions refers to the potential liabilities which can be avoided by adequate risk management, risk transfer or avoiding the transaction completely. This refers to any prospective transaction, for example, lending Money to a borrower or entering into a contract for the provision of services by a service provider.
- 4. An Authorised Person subject to the requirements in Chapter 10 may be required to meet an Individual Capital Requirement imposed under those Rules following the Pillar 2 review process, in addition to the Capital Requirement calculated under Pillar 1.

**Domestic Firms – systems and controls****Guidance**

For the purposes of Part 2, an Authorised Person is required to have appropriate systems and controls in place to enable it to be certain that it has adequate Capital Resources to meet the requirements in Part 4 on capital adequacy at all times and to allow it to demonstrate that at any particular time if required to do so by the Regulator. Where through the operation of those systems and controls an



Authorised Person forms the view that it does not currently or is not likely to be able to satisfy the requirements of Rule 3.2.3 in future, that Authorised Person is required to immediately inform the Regulator in accordance with Rule 3.2.5.

- 3.2.5**
- (1) An Authorised Person 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, adequate at all times to ensure compliance with the applicable capital adequacy requirements.
  - (2) Such systems and controls must be capable of contributing to an analysis of:
    - (a) realistic scenarios which are relevant to the circumstances of the Authorised Person; and
    - (b) the effects on the Capital Requirement of the Authorised Person and on its Capital Resources if those scenarios occurred.
  - (3) An Authorised Person must notify the Regulator immediately and confirm in writing any breach, or expected breach, of any of the provisions of this Chapter by the Authorised Person.

#### **Guidance**

- 1. App3 provides guidance on the nature and type of stress and scenario testing that Authorised Persons should be undertaking frequently to support their view that they have adequate financial resources to meet their obligations.
- 2. The requirements in this Chapter apply to Authorised Persons on a solo basis. An Authorised Person may also be subject to Capital Resources requirements at a Group level. Group requirements are addressed in Chapter 8 of these Rules.

### **PART 3– Calculating Capital Requirements**

#### **3.3 Base Capital Requirement**

- 3.3.1** This Section applies to an Authorised Person in any Category.

#### **Guidance**

The Base Capital Requirement is a component of the calculation of the Capital Requirement under Sections 3.4 and 3.6.

- 3.3.2** The table below sets out the Base Capital Requirement for each Category of Authorised Persons.

Category	Base Capital Requirement (US \$)
1	10 million



Category	Base Capital Requirement (US \$)
2	2 million
3A	500,000, except where an Authorised Person is conducting the Regulated Activity of Dealing in Investments as Principal (only as Matched Principal) in relation to OTC Leveraged Products with Retail Clients in which case the Base Capital Requirement is 2 million.
3B	4 million
3C	250,000, except where an Authorised Person has a Financial Services Permission only to carry out the Regulated Activity of Managing a Collective Investment Fund, in which case the Base Capital Requirement is the higher of: <ul style="list-style-type: none"> <li>a) 150,000 if the Authorised Person manages a Public Fund or any other type of fund that is available to retail customers; or</li> <li>b) 50,000 otherwise.</li> </ul>
4	10,000, except where an Authorised Person has a Financial Services Permission: <ul style="list-style-type: none"> <li>a) to carry out the Regulated Activity of Operating a Private Financing Platform and holds Client Assets, in which case the Base Capital Requirement is 150,000; or</li> <li>b) to carry out the Regulated Activity of Providing Third Party Services, in which case the Base Capital Requirement will be 50,000.</li> </ul>
5	10 million

**3.3.3** An Authorised Person must have Common Equity Tier 1 Capital (CET1 Capital), as defined in Section 3.10, of not less than its relevant Base Capital Requirement at the time that it obtains authorisation and at all times thereafter.

### **3.4 Capital Requirements for Categories 1, 2, 3A and 5**

**3.4.1** This Section applies to an Authorised Person in Category 1, 2, 3A or 5.

- 3.4.2** (1) The Capital Requirement for an Authorised Person is calculated, subject to (2), as the higher of:
- (a) the applicable Base Capital Requirement as set out in Section 3.3; or
  - (b) its Risk Capital Requirement as set out in Section 3.5.

- (2) Where 1(b) is the higher and the Authorised Person has an ICR imposed on it then the Capital Requirement is its ICR plus Risk Capital Requirement.

### **3.5 Risk Capital Requirement**

**3.5.1** An Authorised Person must calculate its Risk Capital Requirement as the sum of the following:

- (a) the Credit Risk Capital Requirement (CRCOM);
- (b) the Market Risk Capital Requirement;
- (c) the Operational Risk Capital Requirement;
- (d) the Displaced Commercial Risk Capital Requirement, where applicable; and
- (e) the CVA Risk Capital Requirement.

#### **CRCOM**

**3.5.2** An Authorised Person must calculate its Credit Risk Capital Requirement in accordance with the applicable Rules in Chapter 4.

#### **Guidance**

- 1. Detailed Rules and Guidance in respect of the CRCOM are specified in Chapter 4. The CRCOM is based on the risk weighted assets (RWA) for all Credit Risk Exposures, securitisation Exposures and Counterparty Risk Exposures.
- 2. Rules and Guidance in respect of calculating the CRCOM for Islamic Contracts are contained in the IFR Rules.

#### **Market Risk Capital Requirement**

**3.5.3** An Authorised Person must calculate its Market Risk Capital Requirement in accordance with the applicable Rules in Chapter 5.

#### **Guidance**

- 1. Detailed Rules and Guidance in respect of the Market Risk Capital Requirement and each of its components are contained in Chapter 5.
- 2. Rules and Guidance in respect of calculating Market Risk for Islamic Contracts are contained in the IFR rules.

#### **Operational Risk Capital Requirement**

**3.5.4** An Authorised Person must calculate its Operational Risk Capital Requirement in accordance with the applicable Rules in Chapter 6.

#### **Displaced Commercial Risk Capital Requirement**

**3.5.5** An Authorised Person Managing a Profit Sharing Investment Account which is a PSIAu must calculate its Displaced Commercial Risk Capital Requirement in accordance with the IFR rules.

**CVA Risk Capital Requirement**

- 3.5.6** An Authorised Person must calculate its CVA Risk Capital Requirement in accordance with the applicable Rules in App5.

**Guidance**

1. An Authorised Person should refer to Chapters 4, 5 and 6 to determine whether it is required to calculate a Credit Risk Capital Requirement (also referred to in these Rules as CRCOM), a Market Risk Capital Requirement or an Operational Risk Capital Requirement, respectively.
2. The Displaced Commercial Risk Capital Requirement will only apply to an Authorised Person Managing a Profit Sharing Investment Account which is a PSIAu.
3. An Authorised Person will also need to consider the relevant provisions in the IFR rules relating to Credit Risk and Market Risk for Islamic Contracts when calculating its CRCOM and Market Risk Capital Requirement.
4. Where the Risk Capital Requirement is the binding Capital Requirement calculated using the provisions in Section 3.4 the Regulator may impose an Individual Capital Requirement (see Chapter 10) on an Authorised Person. Such a requirement is additional to the Risk Capital Requirement and is, therefore, a component of the Capital Requirement for the Authorised Person.

**Total Risk Exposure Amount**

- 3.5.7** An Authorised Person must calculate its Total Risk Exposure Amount, after taking into account the provisions of Rule 3.5.8, as the sum of:

- (a) the Credit RWA as calculated using Rule 4.8.1(2);
- (b) the Risk Exposure Amount associated with the Market Risk Capital Requirement;
- (c) the Risk Exposure Amount associated with the Operational Risk Capital Requirement;
- (d) the Risk Exposure Amount associated with the CVA Risk Capital Requirement; and
- (e) the Risk Exposure Amount associated with Displaced Commercial Risk Capital Requirement, where applicable, calculated in accordance with IFR Rule 5.4.5.

- 3.5.8** An Authorised Person must multiply the individual capital requirements referred to under points 3.5.7(b) to 3.5.7(e) by a factor of 12.5 in order to determine the Risk Exposure Amounts associated with those elements of the Total Risk Exposure Amount.

### Guidance

The Total Risk Exposure Amount must be calculated by Authorised Persons in Categories 1, 2, 3A and 5 for the determination of appropriate minimum Capital Resources and for reporting purposes.

## **3.6 Capital Requirements for Categories 3B, 3C and 4**

**3.6.1** This Section applies to an Authorised Person in Category 3B, 3C or 4.

**3.6.2** Subject to Section 3.6A, the Capital Requirement for such an Authorised Person is calculated as the higher of:

- (a) the applicable Base Capital Requirement as set out in Section 3.3; or
- (b) the Expenditure Based Capital Minimum as set out in Section 3.7.

### Guidance

1. Section 3.6A specifies the Capital Requirements for Authorised Persons undertaking the Regulated Activity of Providing Money Services.
2. The Expenditure Based Capital Minimum is a component of the calculation of the Capital Requirement under Section 3.6 and is relevant in determining whether the Regulator has to be notified under Rule 3.20.2.

## **3.6.A Capital Requirement for Providing Money Services**

**3.6A.1** Subject to Rule 3.6A.7, an Authorised Person with a Financial Services Permission enabling it to carry on the Regulated Activity of Providing Money Services must calculate the Capital Requirement for each activity it undertakes as the highest of:

- (a) the applicable Base Capital Requirement as set out in Section 3.3; and
- (b) (i) where it undertakes currency exchange the Expenditure Based Capital Minimum as set out in Section 3.7;
- (ii) for a Money Remitter:
  - (A) the Expenditure Based Capital Minimum as set out in Section 3.7; and
  - (B) the Variable Capital Requirement calculated in accordance with Rule 3.6A.2;
- (iii) for a Payment Account Provider the Variable Capital Requirement calculated in accordance with Rule 3.6A.4; or
- (iv) for a Stored Value Provider the Variable Capital Requirement calculated in accordance with Rule 3.6A.6.

### Guidance

Where an Authorised Person undertakes two or more of the activities under the Regulated Activity of Providing Money Services at the same time, Rule 3.6A.6 specifies how the overall Capital Requirement for those activities should be calculated.

### Money Remitters

**3.6A.2** A Money Remitter must calculate its Variable Capital Requirement as the sum of the following:

- (a) 1.25% of the first \$10 million of monthly payment volume;
- (b) 0.5% of the next \$90 million of monthly payment volume;
- (c) 0.25% of the next \$150 million of monthly payment volume; and
- (d) 0.125% of any remaining monthly payment volume.

**3.6A.3** (1) Subject to (2), monthly payment volume for a Money Remitter must be calculated as the total value of funds remitted by the Authorised Person in its preceding financial year divided by twelve.

(2) Where the Authorised Person has not completed a full financial year following its authorisation, the monthly payment volume must be calculated using the value of realised funds remitted since its authorisation and the projections contained in its business plan for the remainder of the financial year, subject to any adjustments required by the Regulator.

### Payment Account Providers

**3.6A.4** A Payment Account Provider must calculate its Variable Capital Requirement as the sum of the following:

- (a) 2.5% of the first \$10 million of monthly payment volume;
- (b) 1% of the next \$90 million of monthly payment volume;
- (c) 0.5% of the next \$150 million of monthly payment volume; and
- (d) 0.25% of any remaining monthly payment volume.

**3.6A.5** (1) Subject to (2), monthly payment volume for a Payment Account Provider must be calculated as the total value of Payment Transactions executed by the Authorised Person in its preceding financial year divided by twelve.

(2) Where the Authorised Person has not completed a full financial year following its authorisation, the monthly payment volume must be calculated using the value of realised Payment Transactions since its authorisation and the projections contained in its business plan for the remainder of the financial year, subject to any adjustments required by the Regulator.

### Guidance

1. Under Rules 3.6A.3(2) and 3.6A.5(2), the projections for the remainder of the year should be informed by the value of realised funds remitted or Payment Transactions, as appropriate, following the authorisation of the Authorised Person.
2. The monthly payment volume should be split into tranches, with the first \$10mn being assigned to the first tranche, the next \$90mn to the second tranche and so on.
3. The portion of the Variable Capital Requirement for each tranche is then calculated by multiplying the monthly payment volume in each tranche by the

percentage factor associated with that tranche and then summing those portions to derive the overall Variable Capital Requirement.

4. Examples of the calculation of the Variable Capital Requirement follow for an Authorised Person acting as solely a Money Remitter or a Payment Account Provider, in both cases with a monthly payment volume of \$120mn.

Tranche	Monthly payment volume (\$mn)	Activity	
		Money Remitter	Payment Account Provider
$0 < \dots \leq 10$	10	$1.25\% * 10 = 0.125$	$2.5\% * 10 = 0.250$
$10 < \dots \leq 100$	90	$0.5\% * 90 = 0.450$	$1\% * 90 = 0.900$
$100 < \dots \leq 250$	20	$0.25\% * 20 = 0.050$	$0.5\% * 20 = 0.100$
$\dots > 250$	-	-	-
<b>Total</b>	<b>120</b>		
<b>Variable Capital Requirement (\$mn)</b>		<b>0.625</b>	<b>1.250</b>

### Stored Value Providers

- 3.6A.6** (1) Subject to (2), a Stored Value Provider must calculate its Variable Capital Requirement as 2.5% of the average daily outstanding Stored Value, calculated on the first Business Day of each calendar month and using the outstanding Stored Value at the end of each calendar day over the preceding six calendar months.
- (2) Where the Authorised Person has not completed six months of operations following its authorisation, the average daily outstanding Stored Value must be calculated using the daily outstanding Stored Value since its authorisation and the projections contained in its business plan for the remainder of the six-month period, subject to any adjustments required by the Regulator.

### Guidance

Under (2), the projections for the remainder of the six-month period should be informed by the value of realised daily outstanding Stored Values following the authorisation of the Authorised Person.

### Multiple activities under Providing Money Services

- 3.6A.7** (1) Subject to (2), an Authorised Person undertaking more than one of the activities of being a Money Remitter, a Payment Account Provider and a Stored Value Issuer must calculate its Total Variable Capital Requirement by summing the Variable Capital Requirements calculated under Rules 3.6A.2, 3.6A.4 and 3.6A.6 as appropriate.
- (2) An Authorised Person acting as both a Money Remitter and a Payment Account Provider must calculate its overall Variable Capital Requirement for the related activities by adding together the monthly payment volumes for those activities and undertaking the calculation in Rule 3.6A.4.

### Guidance

An example of the calculation of the Variable Capital Requirement follows for an Authorised Person acting at the same time as a Money Remitter and a Payment Account Provider, with monthly payment volumes of \$90mn and \$120mn respectively for these activities, i.e. a total monthly payment volume of \$210mn.

Tranche	Monthly payment volume (\$mn)	Money Remitter and Payment Account Provider
$0 < \dots \leq 10$	10	$2.5\% * 10 = 0.250$
$10 < \dots \leq 100$	90	$1\% * 90 = 0.900$
$100 < \dots \leq 250$	110	$0.5\% * 110 = 0.550$
$\dots > 250$	-	-
<b>Total</b>	<b>210</b>	
<b>Variable Capital Requirement (\$mn)</b>		<b>1.700</b>

**3.6A.8** An Authorised Person undertaking more than one of the activities under Providing Money Services must calculate its Capital Requirement as the highest of, where applicable;

- (i) the Base Capital Requirement as set out in Section 3.3;
- (ii) the Expenditure Based Capital Minimum calculated in accordance with Rule 3.7.1; and
- (iii) the Total Variable Capital Requirement.

### Guidance

The Total Variable Capital Requirement for an Authorised Person is the aggregate of the Variable Capital Requirements calculated in accordance with Rules 3.6A.2, 3.6A.4, 3.6A.6 and 3.6A.7 as appropriate.

## 3.7 Expenditure Based Capital Minimum

**3.7.1** An Authorised Person, other than one that has a Financial Services Permission to carry out the Regulated Activity of Providing Third Party Services, must calculate its Expenditure Based Capital Minimum as:

- (a) in the case of an Authorised Person which holds Client Assets or Relevant Money or Insurance Money, 18/52nds;
- (b) in the case of an Authorised Person in Category 3B or 3C which does not hold Client Assets or Relevant Money or Insurance Money, 13/52nds; or
- (c) in the case of an Authorised Person in Category 4, which does not hold Insurance Money, 6/52nds;

of the Annual Audited Expenditure, calculated in accordance with Rule 3.7.2.



### Guidance

1. An Authorised Person is considered to be holding Relevant Money and subject to (a) where it offers Payment Services alongside currency exchange or Money Remittance.
2. An Authorised Person undertaking only one or both of currency exchange and Money Remittance to its customers, but not Payment Services, is considered not to hold Client Assets, in the form of Client Money, or Relevant Money and (b) applies.

### Annual Audited Expenditure

- 3.7.2** (1) Subject to Rule 3.7.3, Annual Audited Expenditure constitutes all expenses and losses that arise in the Authorised Person's normal course of business in a twelve-month accounting period (excluding exceptional items) which are recorded in the Authorised Person's audited profit and loss account, less the following items (if they are included in the Authorised Person's audited profit and loss account):
- (a) staff bonuses, except to the extent that they are non-discretionary;
  - (b) the shares of Employees and Directors 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 and fees payable that are directly related to commissions and fees receivable, which are included with total revenue;
  - (e) fees, brokerage and other charges paid to clearing houses, exchanges and intermediate brokers for the purposes of executing, registering or clearing transactions;
  - (f) any expenses for which pre-payments or advances have already been made to the respective claimant (e.g. pre-paid rent, pre-paid communication charges etc.) and deducted from Capital Resources as illiquid assets;
  - (g) foreign exchange losses; and
  - (h) contributions to charities.
- (2) For the purposes of (1)(c), a management charge must not be treated as an appropriation of profits.
- 3.7.3** (1) For the purposes of Rule 3.7.2, an Authorised Person must calculate its relevant Annual Audited Expenditure with reference to the Authorised Person's most recent audited financial statements.
- (2) If the Authorised Person's most recent audited financial statements do not represent a twelve-month accounting period, it must calculate its Annual Audited Expenditure on a pro rata basis so as to produce an equivalent annual amount.

- (3) If an Authorised Person has not completed its first twelve months of business operations, it must calculate its Annual Audited Expenditure based on forecast expenditure as reflected in the budget for the first twelve months of business operations, as submitted with its application for authorisation.
- (4) (a) If an Authorised Person:
  - (i) has a material change in its expenditure (whether up or down); or
  - (ii) has varied its authorised activities,
 it must recalculate its Annual Audited Expenditure and Expenditure Based Capital Minimum accordingly.
- (b) Where an Authorised Person has recalculated its Annual Audited Expenditure and Expenditure Based Capital Minimum in accordance with (a), it must submit this recalculation to the Regulator within seven days of its completion and seek agreement/approval from the Regulator. The Regulator may within thirty days of receiving the recalculation object to the recalculation and require the Authorised Person to revise its Expenditure Based Capital Minimum.

### **Liquid assets**

- 3.7.4**
- (1) An Authorised Person to which this Section applies must maintain, at all times, an amount of assets which exceeds its Expenditure Based Capital Minimum in the form of liquid assets.
  - (2) For the purpose of this Rule, and subject to (3), liquid assets comprise any of the following:
    - (a) cash in hand;
    - (b) Money deposited with a regulated bank or Deposit-taker which has a short-term credit rating of A1 or P1 (or equivalent) and above from an ECAI;
    - (c) demand Deposits with a tenor of one year or less with a bank or Deposit-taker in (b);
    - (d) time Deposits with a tenor of one year or less which have an option to redeem the Deposit at any time. In such cases, the Deposit amount eligible to be included as liquid assets must be calculated as net of any costs associated with such early redemption;
    - (e) cash receivable from a regulated clearing house and cash Deposits with such clearing houses, other than any fees or contributions to guarantee or reserve funds of such clearing houses; or
    - (f) any other asset which may be approved by the Regulator as comprising a liquid asset for the purpose of this Rule.
  - (3) For the purpose of this Rule, liquid assets do not include:

- (a) any Investment, asset or Deposit which has been pledged as security or Collateral for any obligations or liabilities assumed by it or by any other third party; or
- (b) cash held in Client Money or Insurance Money accounts.

## **PART 4 – Calculating Capital Resources**

### **3.8 Application**

**3.8.1** This Part applies to an Authorised Person in any Category.

#### **Guidance**

The earlier Section 3.2 imposes a number of basic requirements on an Authorised Person, including requirements to have and maintain a quantity and quality of Capital Resources which would enable it to meet its capital adequacy requirements specified in Chapter 3 of these Rules.

### **3.9 Tier 1 capital**

**3.9.1** Tier 1 capital must be calculated as the total of its Common Equity Tier 1 capital (referred to in these Rules as CET1 Capital) and its Additional Tier 1 capital (referred to in these Rules as AT1 Capital).

#### **Guidance**

The Tier 1 capital (referred to in these Rules as T1 Capital) of an Authorised Person refers to "going concern" capital which allows an Authorised Person to continue its activities and prevent insolvency of the Authorised Person.

### **3.10 Common Equity Tier 1 capital (CET1 Capital)**

**3.10.1** CET1 Capital constitutes the sum of CET1 capital elements in Rule 3.10.2, subject to the adjustments, deductions and exemptions stipulated later in this Part.

**3.10.2** CET1 Capital consists of the sum of the following capital elements:

- (a) capital instruments, provided the conditions laid down in Rule 3.10.3 are fully met;
- (b) Share premium accounts related to the instruments referred to in (a);
- (c) retained earnings;
- (d) accumulated other comprehensive income, as defined in the International Financial Reporting Standards; and
- (e) other reserves which are required to be disclosed under International Financial Reporting Standards, excluding any amounts already included in accumulated other comprehensive income or retained earnings.

**3.10.3** (1) For the purposes of Rule 3.10.2(a), a capital instrument is eligible for inclusion in CET1 Capital where all the following conditions are met:

- (a) the instruments are issued directly by the Authorised Person with the prior written approval of the shareholders of the Authorised Person;
- (b) the instruments are fully paid up and their purchase is not funded directly or indirectly by the Authorised Person;
- (c) the instruments meet all the following conditions as regards their classification:
  - (i) they qualify as equity capital within the meaning of the Companies Regulations;
  - (ii) they are classified as equity within the meaning of the International Financial Reporting Standards; and
  - (iii) they are classified as equity capital for the purposes of determining balance sheet insolvency, under the Insolvency Regulations;
- (d) the instruments are clearly and separately disclosed on the balance sheet in the financial statements of the Authorised Person;
- (e) the instruments are perpetual;
- (f) the principal amount of the instruments may not be reduced or repaid, except in either of the following cases:
  - (i) the liquidation of the Authorised Person; or
  - (ii) discretionary repurchases of the instruments or other discretionary means of reducing capital, where the Authorised Person has notified the Regulator of its intention to do so, in writing, at least thirty days prior to taking such steps;
- (g) the provisions governing the instruments do not indicate expressly or implicitly that the principal amount of the instruments would or might be reduced or repaid other than in the liquidation of the Authorised Person, and the Authorised Person does not otherwise provide such an indication prior to or at issuance of the instruments;
- (h) the instruments meet the following conditions as regards distributions:
  - (i) there are no preferential distributions, including in relation to other CET1 Capital instruments, and the terms governing the instruments do not provide preferential rights to payment of distributions;
  - (ii) distributions to holders of the instruments may be paid only out of distributable items;
  - (iii) the conditions governing the instruments do not include a cap or other restriction on the maximum level of distributions;

- (iv) the level of distributions is not determined on the basis of the amount for which the instruments were purchased at issuance;
  - (v) the conditions governing the instruments do not include any obligation for the Authorised Person to make distributions to its holders and the Authorised Person is not otherwise subject to such an obligation;
  - (vi) non-payment of distributions does not constitute an event of default of the Authorised Person; and
  - (vii) the cancellation of distributions imposes no restrictions on the institution;
- (i) compared to all the capital instruments issued by the Authorised Person, the instruments absorb the first and proportionately greatest share of losses as they occur, and each instrument absorbs losses to the same degree as all other CET1 Capital instruments;
- (j) the instruments rank below all other claims in the event of insolvency or liquidation of the Authorised Person;
- (k) the instruments entitle their owners to a claim on the residual assets of the Authorised Person, which, in the event of its liquidation and after the payment of all senior claims, is proportionate to the amount of such instruments issued and is not fixed or subject to a cap;
- (l) the instruments are not secured, or guaranteed by any of the following:
  - (i) the Authorised Person or its Subsidiaries;
  - (ii) any Parent of the Authorised Person or its Subsidiaries; or
  - (iii) any member of its Financial Group; and
- (m) the instruments are not subject to any arrangement, contractual or otherwise, that enhances the seniority of claims under the instruments in insolvency or liquidation.
- (2) The conditions in (1)(i) must be complied with notwithstanding a write-down on a permanent basis of the principal amount of AT1 Capital instruments.
- (3) Where any of the conditions in (1) cease to be met:
  - (a) the instrument must cease to qualify as a CET1 Capital instrument; and
  - (b) the share premium accounts that relate to that instrument must cease to qualify as a CET1 element.

**3.10.4** For the purposes of Rule 3.10.2(c), an Authorised Person may include interim or year-end net profits in CET1 Capital before the Authorised Person has approved

its annual audited accounts confirming its final profit or loss for the year, but only where:

- (a) those profits have been reviewed by the external Auditor of the Authorised Person, which is responsible for auditing its accounts; and
- (b) the Authorised Person is fully satisfied that any foreseeable charge or dividend has been deducted from the amount of those net profits.

### **Guidance**

The review of the interim or year-end profits of the Authorised Person referred to in Rule 3.10.4 should be undertaken in accordance with the requirements of GEN 6 and provide an adequate level of assurance that those profits have been evaluated in accordance with the principles set out in the International Financial Reporting Standards. The Regulator may request an Authorised Person to provide it with a copy of its external Auditor's opinion on whether the interim profits are reasonably stated.

### **CET1 Adjustments**

**3.10.5** An Authorised Person must, in the calculation of CET1 Capital, exclude the following:

- (a) any increase in its equity under the International Financial Reporting Standards, including:
  - (i) where such an increase is associated with future margin income that results in a gain on sale for the Authorised Person; and
  - (ii) where the Authorised Person is the Originator of a securitisation, net gains that arise from the capitalisation of future income from the securitised assets that provide Credit Enhancement to positions in the securitisation;
- (b) the amount of cash flow hedge reserve related to gains or losses on cash flow hedges of Financial Instruments that are not valued at fair value, including projected cash flows; and
- (c) all unrealised gains or losses on liabilities of the Authorised Person that are valued at fair value, and which result from changes in the Authorised Person's own credit quality, except when such gains or losses are offset by a change in the fair value of another Financial Instrument which is measured at fair value and resulting from changes in the Authorised Person's own credit quality.

**3.10.6** Except for the items referred to in Rule 3.10.5, an Authorised Person must not make any adjustments to remove from its Capital Resources unrealised gains or losses on its assets or liabilities measured at fair value.

### **Guidance**

An Authorised Person is expected to follow the guidance provided in respect of prudent valuation in Section 2.4 and in App2, in valuing all its assets measured at fair value while calculating its Capital Resources.

## CET1 Deductions

**3.10.7** Subject to the following Rules in this Section, an Authorised Person must deduct the following from the calculation of its CET1 Capital:

- (a) losses for the current financial year;
- (b) goodwill and other intangible assets as defined in the International Financial Reporting Standards;
- (c) deferred tax assets that rely on future profitability;
- (d) defined benefit pension fund assets of the Authorised Person;
- (e) the applicable amount, by reference to Rule 3.10.12, of direct and indirect holdings by an Authorised Person of its own CET1 Capital instruments including instruments under which an Authorised Person is under an actual or contingent obligation to effect a purchase by virtue of an existing contractual obligation;
- (f) holdings of the CET1 Capital instruments of Relevant Entities where those entities have a reciprocal cross holding with the Authorised Person which have the effect of artificially inflating the Capital Resources of the Authorised Person;
- (g) the applicable amount, by reference to Rule 3.10.13, of direct and indirect holdings by the Authorised Person of CET1 Capital instruments of Relevant Entities where the Authorised Person does not have a significant investment in those entities;
- (h) the applicable amount, by reference to Rules 3.10.13 and 3.10.18, of direct and indirect holdings by the Authorised Person of the CET1 Capital instruments of Relevant Entities where the Authorised Person has a significant investment in those entities;
- (i) the amount of items required to be deducted from the calculation of AT1 Capital in accordance with the relevant Rules under Section 3.11, that exceeds the AT1 Capital of the Authorised Person;
- (j) the Exposure amount of the following items which qualify for a risk weight of 1000%, where the Authorised Person deducts that Exposure amount from CET1 Capital as an alternative to applying a risk weight of 1000%:
  - (i) Qualifying Holdings;
  - (ii) securitisation positions, in accordance with relevant Rules in Chapter 4; and
  - (iii) free deliveries, in accordance with the Rules in Section A4.6; and
- (k) for an Authorised Person which is a Partnership, the amount by which the aggregate of the amounts withdrawn by its Partners or members exceeds the profits of that firm.



### **CET1 Deductions - intangible assets**

**3.10.8** For the purposes of Rule 3.10.7(b), an Authorised Person must determine the intangible assets to be deducted in accordance with the following:

- (a) the amount to be deducted must be reduced by the amount of associated deferred tax liabilities that would be extinguished if the intangible assets became impaired or were derecognised under the International Financial Reporting Standards; and
- (b) the amount to be deducted must include goodwill included in the valuation of significant Investments of the Authorised Person.

### **CET1 Deductions - deferred tax assets**

**3.10.9** (1) For the purposes of Rule 3.10.7(c), and subject to (2), the amount of deferred tax assets that rely on future profitability must be calculated without reducing it by the amount of the associated deferred tax liabilities of the Authorised Person.

- (2) The amount of deferred tax assets that rely on future profitability may be reduced by the amount of the associated deferred tax liabilities of the Authorised Person, provided the following conditions are met:
  - (a) those deferred tax assets and associated deferred tax liabilities both arise from the tax law of the same tax jurisdiction; and
  - (b) the taxation authority of that tax jurisdiction permits the offsetting of deferred tax assets and the associated deferred tax liabilities.

### **Guidance**

1. Deferred tax assets are assets that may be used to reduce the amount of an Authorised Person's future tax obligations. Associated deferred tax liabilities of the Authorised Person used for the purposes of Rule 3.10.9 may not include deferred tax liabilities that reduce the amount of intangible assets or defined benefit pension fund assets required to be deducted. The amount of associated deferred tax liabilities referred to in this guidance should be allocated between the following:
  - a. deferred tax assets that rely on future profitability and arise from temporary differences that are not deducted as part of a threshold exemption for deductions from CET 1 Capital; and
  - b. all other deferred tax assets that rely on future profitability.
2. An Authorised Person should allocate the associated deferred tax liabilities according to the proportion of deferred tax assets that rely on future profitability that the items referred to in Guidance note 1.a. and b. represent.

**3.10.10** (1) An Authorised Person must apply a risk weight in accordance with Chapter 4, as applicable, to deferred tax assets that do not rely on future profitability.

- (2) For the purpose of (1), deferred tax assets that do not rely on future profitability comprise the following:



- (a) overpayments of tax by the Authorised Person for the current year;
- (b) current year tax losses of the Authorised Person carried back to previous years that give rise to a claim on, or a receivable from, a central government, regional government or local tax authority; and
- (c) deferred tax assets arising from temporary differences which, in the event the Authorised Person incurs a loss, becomes insolvent or enters liquidation, are replaced, on a mandatory and automatic basis in accordance with the applicable national law, with a claim on the central government of the jurisdiction in which the Authorised Person is incorporated which must absorb losses to the same degree as CET1 Capital instruments on a going concern basis and in the event of insolvency or liquidation of the Authorised Person.

#### **CET1 Deductions - defined benefit pension fund assets**

**3.10.11** For the purposes of Rule 3.10.7(d), the amount of defined benefit pension fund assets to be deducted from CET1 Capital must be reduced by the following:

- (a) the amount of any associated deferred tax liability which could be extinguished if the assets became impaired or were derecognised under the International Financial Reporting Standards; and
- (b) the amount of assets in the defined benefit pension fund which the Authorised Person has an unrestricted ability to use where the Authorised Person has provided adequate advance notification of its intention to use those assets to the Regulator. Those assets used to reduce the amount to be deducted must receive a risk weight in accordance with Chapter 4 of these Rules.

#### **CET1 Deductions - holdings of own CET1 Capital instruments**

**3.10.12** For the purposes of Rule 3.10.7(e), an Authorised Person must calculate holdings of its own CET1 Capital instruments on the basis of gross long positions subject to the following exceptions:

- (a) an Authorised Person must calculate the amount of holdings of own CET1 Capital instruments in the Trading Book on the basis of the net long position, provided the long and short positions are in the same underlying Exposure and the short positions involve no Counterparty Credit Risk;
- (b) an Authorised Person must determine the amount to be deducted for indirect holdings in the Trading Book that take the form of holdings of index Securities by calculating the underlying Exposure to own CET1 Capital instruments included in the indices; and
- (c) an Authorised Person must net gross long positions in own CET1 Capital instruments in its Trading Book resulting from holdings of index Securities against short positions in own CET1 Capital instruments resulting from short positions in the underlying indices, including where those short positions involve Counterparty Credit Risk.

### **CET1 Deductions - significant investment in a Relevant Entity**

**3.10.13** For the purposes of Rules 3.10.7(g) and (h), an investment by an Authorised Person in a Relevant Entity must be considered as a significant investment if it meets any of the following conditions:

- (a) the Authorised Person owns more than 10% of the CET1 Capital instruments issued by that entity;
- (b) the Authorised Person has Close Links with that entity and owns CET1 Capital instruments issued by that entity; or
- (c) the Authorised Person owns CET1 Capital instruments issued by that entity and the entity is not included in consolidation pursuant to Chapter 8 of these Rules but is included in the same accounting consolidation as the Authorised Person for the purposes of financial reporting under the International Financial Reporting Standards.

### **CET1 Deductions - investments in CET1 Capital instruments of Relevant Entities**

**3.10.14** For the purposes of Rule 3.10.7(f), (g) and (h), the amount of holdings of CET1 Capital instruments and other capital instruments of Relevant Entities to be deducted, must be calculated, subject to Rule 3.10.15, on the basis of the gross long positions.

**3.10.15** For the purposes of Rule 3.10.7(g) and (h), an Authorised Person must make the deductions in accordance with the following:

- (a) the holdings in the Trading Book of the capital instruments of Relevant Entities must be calculated on the basis of the net long position in the same underlying Exposure provided the maturity of the short position matches the maturity of the long position or has a residual maturity of at least one year; and
- (b) the amount to be deducted for indirect holdings in the Trading Book of the capital instruments of Relevant Entities that take the form of holdings of index Securities must be determined by calculating the underlying Exposure to the capital instruments of the Relevant Entities in the indices.

**3.10.16** (1) For the purposes of Rule 3.10.7(g), the amount to be deducted is calculated by multiplying the amount referred to in (a) by the factor derived from the calculation referred to in (b):

- (a) the aggregate amount by which the direct, indirect and synthetic holdings by the Authorised Person of the CET1, AT1 and T2 Capital instruments of Relevant Entities, in which the Authorised Person does not have a significant investment, exceeds 10% of the CET1 items of the Authorised Person calculated after applying the following to CET1 items:
  - (i) all of the adjustments referred to in Rules 3.10.5 and 3.10.6;
  - (ii) the deductions referred to in Rules 3.10.7(a) to (f) and (h) to (j), excluding the amount to be deducted for deferred tax

assets that rely on future profitability and arise from temporary differences; and

- (iii) the deductions referred to in Rules 3.10.14 and 3.10.15;
    - (b) the amount of direct and indirect holdings by the Authorised Person of the CET1 Capital instruments of Relevant Entities divided by the aggregate amount of direct and indirect holdings by the Authorised Person of the CET1, AT1 and T2 Capital instruments issued by those Relevant Entities.
  - (2) An Authorised Person must exclude Underwriting positions held for five working days or fewer from the amount referred to in (1)(a) and from the calculation of the factor referred to in (1)(b).
  - (3) The amount to be deducted pursuant to (1) must be apportioned across each CET1 Capital instrument held. An Authorised Person must determine the portion of holdings of CET1 Capital instruments that is to be deducted pursuant to (1) by dividing the amount specified in (a) by the amount specified in (b):
    - (a) the amount of holdings required to be deducted pursuant to (1)(a);
    - (b) the aggregate amount of direct and indirect holdings by the Authorised Person of all the capital instruments of Relevant Entities in which the Authorised Person does not have a significant investment.
- 3.10.17** (1) The amount of holdings referred to in Rule 3.10.7(g) that is equal to or less than 10% of the CET1 items of the Authorised Person after applying the provisions laid down in Rule 3.10.16(1)(a) must not be deducted and must be subject to the applicable risk weights in accordance with Chapter 4.
- (2) An Authorised Person must determine the portion of holdings of all the capital instruments that is risk weighted by dividing the amount specified in (a) by the amount specified in (b):
- (a) the amount of holdings required to be risk weighted pursuant to Rule 3.10.17(1);
  - (b) the aggregate amount of direct and indirect holdings by the Authorised Person of all the capital instruments of Relevant Entities in which the Authorised Person does not have a significant investment.
- 3.10.18** For the purposes of Rule 3.10.7(h), the amount to be deducted from CET1 elements must exclude Underwriting positions held for five working days or fewer and must be determined in accordance with Rules 3.10.14 and 3.10.15.

### **CET1 Deductions - exemptions**

- 3.10.19** (1) In making the deductions required pursuant to Rules 3.10.7(c) and (h), an Authorised Person must not deduct the items listed in (a) and (b), where in aggregate they are equal to or less than 15% of CET1 Capital.

- (a) Deferred tax assets that are dependent on future profitability and arise from temporary differences, and in aggregate are equal to or less than 10% of the CET1 items of the Authorised Person calculated after applying the following:
  - (i) adjustments referred in Rules 3.10.5 and 3.10.6; and
  - (ii) deductions referred to in (a) to (g) and (i) to (j) of Rule 3.10.7, excluding deferred tax assets that rely on future profitability and arise from temporary differences.
- (b) Where an Authorised Person has a significant investment in a Relevant Entity, the direct and indirect holdings of that Authorised Person of the CET1 Capital instruments of those entities that in aggregate are equal to or less than 10% of the CET1 items of the Authorised Person calculated after applying the following:
  - (i) adjustments referred in Rules 3.10.5 and 3.10.6; and
  - (ii) deductions referred to in (a) to (h) and (i) to (j) of Rule 3.10.7 excluding deferred tax assets that rely on future profitability and arise from temporary differences.
- (2) Items that are not deducted pursuant to (1) must be risk weighted at 200% and subject to the requirements of Chapter 4, as applicable.

### **3.11 Additional Tier 1 capital**

**3.11.1** Additional Tier 1 Capital (referred to in these Rules as AT1 Capital) constitutes the sum of AT1 Capital elements in Rule 3.11.2, subject to the deductions stipulated later in this Section.

**3.11.2** AT1 Capital consists of the sum of the following capital elements:

- (a) capital instruments which meet the eligibility criteria laid down in Rule 3.11.3; and
- (b) the Share premium accounts related to the instruments referred to in (a).

**3.11.3** (1) For the purposes of Rule 3.11.2(a), a capital instrument is eligible for inclusion in AT1 Capital where all of the following conditions are met:

- (a) the instruments are issued and paid up;
- (b) the instruments are not purchased by any of the following:
  - (i) the Authorised Person or its Subsidiaries; or
  - (ii) an Undertaking in which the Authorised Person has participation in the form of ownership, direct or by way of control, of 20% or more of the voting rights or capital of that Undertaking;
- (c) the purchase of the instruments is not funded directly or indirectly by the Authorised Person;

- (d) the instruments rank below T2 Capital instruments in the event of the insolvency of the Authorised Person;
- (e) the instruments are not secured, or guaranteed by any of the following:
  - (i) the Authorised Person or its Subsidiaries;
  - (ii) any Parent of the Authorised Person or their Subsidiaries;
  - (iii) any member of its Financial Group in accordance with Chapter 8; or
  - (iv) any Undertaking that has Close Links with entities referred to in (i) to (iii);
- (f) the instruments are not subject to any arrangement, contractual or otherwise that enhances the seniority of the claim under the instruments in insolvency or liquidation;
- (g) the instruments are perpetual and the provisions governing them include no incentive for the Authorised Person to redeem them;
- (h) where the provisions governing the instruments include one or more call Options, the option to call may be exercised at the sole discretion of the Issuer;
- (i) the instruments may be called, redeemed or repurchased only where the Authorised Person has notified the Regulator of its intention to call, redeem or repurchase the instruments in writing and well in advance, and not before five years after the date of issuance of the respective instruments;
- (j) the provisions governing the instruments do not indicate explicitly or implicitly that the instruments would or might be called, redeemed or repurchased and the Authorised Person does not otherwise provide such an indication;
- (k) the Authorised Person does not indicate explicitly or implicitly that the Regulator would not object to a plan to call, redeem or repurchase the instruments;
- (l) distributions under the instruments meet the following conditions:
  - (i) they are paid out of distributable items;
  - (ii) the level of distributions made on the instruments will not be modified based on the credit standing of the Authorised Person or any of its Parents or any entities in its Financial Group;
  - (iii) the provisions governing the instruments give the Authorised Person full discretion at all times to cancel the distributions on the instruments for an unlimited period and on a non-cumulative basis, and the Authorised Person may

use such cancelled payments without restriction to meet its obligations as they fall due;

- (iv) cancellation of distributions does not constitute an event of default of the Authorised Person; and
  - (v) the cancellation of distributions imposes no restrictions on the Authorised Person;
  - (m) the instruments do not contribute to a determination that the liabilities of an Authorised Person exceed its assets, where such a determination constitutes a test of insolvency under the Insolvency Regulations;
  - (n) the provisions governing the instruments require the principal amount of the instruments to be written down, or the instruments to be converted to CET1 Capital instruments, upon the occurrence of a trigger event;
  - (o) the instruments are capable of absorbing losses at the point of non-viability through the contractual provisions governing the instruments meeting the requirements set out in Rule 3.11.3(4);
  - (p) the provisions governing the instruments include no feature that could hinder the recapitalisation of the Authorised Person; and
  - (q) where the instruments are not issued directly by the Authorised Person or by an operating entity within the Financial Group to which the Authorised Person belongs, or by the Parent of the Authorised Person, the proceeds are immediately available without limitation in a form that satisfies the conditions laid down in this Rule to any of the following:
    - (i) the Authorised Person;
    - (ii) an operating entity within the Financial Group to which the Authorised Person belongs; or
    - (iii) any Parent of the Authorised Person.
- (2) For the purposes of (1)(l)(v) and (1)(p), the provisions governing AT1 Capital instruments must not include the following:
- (a) a requirement for distributions on the instruments to be made in the event of a distribution being made on an instrument issued by the Authorised Person that ranks to the same degree as, or more junior than, an AT1 Capital instrument;
  - (b) a requirement for the payment of distributions on CET1, AT1 or T2 Capital instruments to be cancelled in the event that distributions are not made on those AT1 Capital instruments; or
  - (c) an obligation to substitute the payment of interest or dividend by a payment in any other form.

- (3) For the purposes of (1)(n), the following provisions apply to AT1 Capital instruments:
- (a) a trigger event occurs when the CET1 Capital of the Authorised Person falls below either of the following:
    - (i) 6.625% of its Total Risk Exposure Amount; or
    - (ii) a level higher than 6.625%, where determined by the Authorised Person and specified in the provisions governing the instrument;
  - (b) where the provisions governing the instruments require them to be converted into CET1 Capital instruments upon the occurrence of a trigger event, those provisions must specify either of the following:
    - (i) the rate of such conversion and a limit on the permitted amount of conversion; or
    - (ii) a range within which the instruments will convert into CET1 Capital instruments;
  - (c) where the provisions governing the instruments require their principal amount to be written down upon the occurrence of a trigger event, the write down must reduce all the following:
    - (i) the claim of the holder of the instrument in the liquidation of the Authorised Person;
    - (ii) the amount required to be paid in the event of the call of the instrument; and
    - (iii) the distributions made on the instrument.
- (4) For the purposes of (1)(o), the following provisions apply to AT1 Capital instruments.
- (a) The provisions governing AT1 Capital instruments must require such instruments to, at the option of the Regulator, either be partially or fully written down or converted into ordinary shares upon the occurrence of a trigger event.
  - (b) For the purpose of this provision, a "trigger event" shall refer to a notification by the Regulator notifying the Authorised Person in writing, in accordance with any regulations of ADGM relating to recovery and resolution, that the Regulator has determined that unless a write down or conversion is conducted, the Authorised Person will no longer be viable.
  - (c) Any compensation paid to the instrument holders as a result of a write down shall be paid immediately and in the form of ordinary shares of the Authorised Person, or the holding company of the Authorised Person if approved by the Regulator.
  - (d) The Authorised Person shall maintain at all times all prior authorisation necessary to issue immediately the relevant number



of ordinary shares should the trigger event occur and the AT1 Capital instruments be converted into ordinary shares.

- (e) Where an Authorised Person intends to include the AT1 Capital instruments issued by a Subsidiary in a non-ADGM jurisdiction in the consolidated AT1 Capital, the Authorised Person may do so, to the extent permitted under these Rules, if the provisions governing the instrument specify a trigger event equivalent to the trigger specified in paragraph (b) above, or where the trigger event relates to the supervisor of the Subsidiary deciding to make a public sector injection of capital or equivalent support, without which the Authorised Person would no longer be viable. The Regulator will only activate such triggers in respect of such Subsidiary, after consultation with the supervisor of the Subsidiary, where:
  - (i) if applicable, the Subsidiary is non-viable as determined by the supervisor of the Subsidiary in accordance with applicable laws of that jurisdiction on insolvency, resolution or recovery of financial institutions; and
  - (ii) the Authorised Person is, or would be, non-viable, as determined by the Regulator, as a result of providing, or committing to provide, a capital injection or similar support to the Subsidiary.
- (f) For the purposes of paragraph (e) above, any ordinary shares paid as compensation to the holders of the capital instrument shall be ordinary shares of either the Subsidiary or of the Authorised Person.
- (5) The following must apply where, in the case of an AT1 Capital instrument, the conditions laid down in this Rule cease to be met:
  - (a) that instrument must cease to qualify as an AT1 Capital instrument; and
  - (b) the part of the Share premium accounts that relates to that instrument must cease to qualify as an AT1 Capital element.

### **Guidance**

Where the Regulator determines that certain conditions in relation to the viability of the institution are met, capital instruments eligible for inclusion in AT1 Capital will be either partially or fully written down or converted into ordinary shares.

### **AT1 Deductions**

**3.11.4** Subject to the following Rules in this Section, an Authorised Person must deduct the following from the calculation of its AT1 Capital:

- (a) direct and indirect holdings by an Authorised Person of own AT1 Capital instruments including instruments under which an Authorised Person is under an actual or contingent obligation to effect a purchase by virtue of an existing contractual obligation;
- (b) holdings of the AT1 Capital instruments of Relevant Entities where those entities have a reciprocal cross-holding with the Authorised Person which



have the effect of artificially inflating the Capital Resources of the Authorised Person;

- (c) the amount determined in accordance with Rule 3.11.8 of direct and indirect holdings by the Authorised Person of the AT1 Capital instruments of Relevant Entities where the Authorised Person does not have a significant investment in those entities;
- (d) direct and indirect holdings by the Authorised Person of the AT1 Capital instruments of Relevant Entities where the Authorised Person has a significant investment in those entities, excluding Underwriting positions held for five working days or fewer; and
- (e) the amounts required to be deducted from T2 Capital pursuant to Rule 3.12.4 that exceed the T2 Capital of the Authorised Person.

#### **AT1 Deductions - holdings of own AT1 Capital instruments**

**3.11.5** For the purposes of Rule 3.11.4(a), an Authorised Person must calculate holdings of its own AT1 Capital instruments on the basis of gross long positions subject to the following exceptions:

- (a) an Authorised Person must calculate the amount of holdings of own AT1 Capital instruments in the Trading Book on the basis of the net long position provided the long and short positions are in the same underlying Exposure and the short positions involve no Counterparty Credit Risk;
- (b) an Authorised Person must determine the amount to be deducted for indirect holdings in the Trading Book of own AT1 Capital instruments that take the form of holdings of index Securities by calculating the underlying Exposure to own AT1 Capital instruments in the indices; and
- (c) an Authorised Person must net gross long positions in own AT1 Capital instruments in the Trading Book resulting from holdings of index Securities against short positions in own AT1 instruments resulting from short positions in the underlying indices, including where those short positions involve Counterparty Credit Risk.

#### **AT1 Deductions - investments in AT1 Capital instruments of Relevant Entities**

**3.11.6** For the purposes of Rule 3.11.4(b), (c) and (d), the amount of holdings of AT1 Capital instruments of Relevant Entities to be deducted must be calculated on the basis of the gross long positions.

**3.11.7** For the purposes of Rule 3.11.4(c) and (d), an Authorised Person must make the deductions in accordance with the following:

- (a) the holdings in the Trading Book of the capital instruments of Relevant Entities must be calculated on the basis of the net long position in the same underlying Exposure provided the maturity of the short position matches the maturity of the long position or has a residual maturity of at least one year; and
- (b) the amount to be deducted for indirect holdings in the Trading Book of the capital instruments of Relevant Entities that take the form of holdings of index

Securities must be determined by calculating the underlying Exposure to the capital instruments of the Relevant Entities in the indices.

### **AT1 Deductions - significant investment in a Relevant Entity**

- 3.11.8** (1) For the purposes of Rule 3.11.4(c), an Authorised Person must calculate the applicable amount to be deducted by multiplying the amount referred to in (a) by the factor derived from the calculation referred to in (b):
- (a) the amount referred to in Rule 3.10.16(1)(a);
  - (b) the amount of direct and indirect holdings by the Authorised Person of the AT1 Capital instruments of Relevant Entities divided by the aggregate amount of all direct and indirect holdings by the Authorised Person of the CET1, AT1 and T2 Capital instruments of those Relevant Entities.
- (2) An Authorised Person must exclude Underwriting positions held for five working days or fewer from the amount referred to in Rule 3.10.16(1)(a) and from the calculation of the factor referred to in (1)(b).
- (3) An Authorised Person must determine the portion of holdings of AT1 Capital instruments that is to be deducted pursuant to (1) by dividing the amount specified in (a) by the amount specified in (b):
- (a) the amount of holdings required to be deducted pursuant to (1)(a);
  - (b) the aggregate amount of direct and indirect holdings by the Authorised Person of all the capital instruments of Relevant Entities in which the Authorised Person does not have a significant investment.

## **3.12 Tier 2 capital**

- 3.12.1** Tier 2 Capital (referred to in these Rules as T2 Capital) constitutes the sum of the elements in Rule 3.12.2 subject to the deductions stipulated later in this Section.

### **Guidance**

Tier 2 capital refers to "gone concern" capital which helps to ensure that depositors and senior creditors can be repaid if an Authorised Person fails. Tier 2 capital allows an Authorised Person to continue its activities and prevent insolvency of the Authorised Person.

- 3.12.2** T2 Capital consists of the sum of the following elements:

- (a) capital instruments which meet the eligibility criteria laid down in Rule 3.12.3; and
- (b) the Share premium accounts related to the instruments referred to in (a).

- 3.12.3** (1) For the purpose of Rule 3.12.2(a), a capital instrument or subordinated loan is eligible for inclusion in T2 Capital where all the following conditions are met:
- (a) the instruments are issued and fully paid-up;

- (b) the instruments are not purchased by any of the following:
  - (i) the Authorised Person or its Subsidiaries;
  - (ii) an Undertaking in which the Authorised Person has participation in the form of ownership, direct or by way of control, of 20% or more of the voting rights or capital of that Undertaking;
- (c) the purchase of the instruments is not funded directly or indirectly by the Authorised Person;
- (d) the claim on the principal amount of the instruments under the provisions governing the instruments is wholly subordinated to claims of all non-subordinated creditors;
- (e) the instruments are not secured, or guaranteed by any of the following:
  - (i) the Authorised Person or its Subsidiaries;
  - (ii) any Parent of the Authorised Person or their Subsidiaries;
  - (iii) any member of the Financial Group to which the Authorised Person belongs; or
  - (iv) any Undertaking that has Close Links with entities referred to in (i) to (iii);
- (f) the instruments are not subject to any arrangement that otherwise enhances the seniority of the claim under the instruments;
- (g) the instruments have an Original Maturity of at least five years;
- (h) the provisions governing the instruments do not include any incentive for them to be redeemed by the Authorised Person;
- (i) where the instruments include one or more call Options, the Options are exercisable at the sole discretion of the Issuer;
- (j) the instruments may be called, redeemed or repurchased only where the Authorised Person has notified the Regulator of its intention to call, redeem or repurchase the instruments in writing and well in advance, and not before five years after the date of issuance of the respective instruments;
- (k) the provisions governing the instruments do not indicate or suggest that the instruments would or might be redeemed or repurchased other than at maturity and the Authorised Person does not otherwise provide such an indication or suggestion;
- (l) the provisions governing the instruments do not give the holder the right to accelerate the future scheduled payment of interest or principal, other than in the insolvency or liquidation of the Authorised Person;

- (m) the level of interest or dividend payments due on the instruments will not be modified based on the credit standing of the Authorised Person, its Parent or any member of its Financial Group;
  - (n) the instruments are capable of absorbing losses at the point of non-viability through the contractual provisions governing the instruments meeting the requirements set out in Rule 3.12.3(3); and
  - (o) where the instruments are not issued directly by the Authorised Person or by an operating entity within its Financial Group, or by its Parent, the proceeds are immediately available without limitation in a form that satisfies the conditions laid down in this Rule to any of the following:
    - (i) the Authorised Person;
    - (ii) an operating entity within its Financial Group; or
    - (iii) any Parent of the Authorised Person.
- (2) The extent to which T2 Capital instruments can be considered as eligible for inclusion in T2 Capital during the final five years of maturity of those instruments is calculated by multiplying the result derived from the calculation in (a) by the amount referred to in (b):
  - (a) the nominal amount of the instruments on the first day of the final five year period of their contractual maturity divided by the number of calendar days in that period;
  - (b) the number of remaining calendar days of contractual maturity of the instruments.
- (3) For the purposes of (1)(n), the following provisions apply to T2 Capital instruments.
  - (a) The provisions governing T2 Capital instruments must require such instruments to, at the option of the Regulator, either be partially or fully written down or converted into ordinary shares upon the occurrence of a trigger event.
  - (b) For the purpose of this provision, a "trigger event" shall refer to a notification by the Regulator notifying the Authorised Person in writing, in accordance with any regulations of ADGM relating to recovery and resolution, that the Regulator has determined that unless a write down or conversion is conducted, the Authorised Person will no longer be viable.
  - (c) Any compensation paid to the instrument holders as a result of a write down shall be paid immediately and in the form of ordinary shares of the Authorised Person, or the holding company of the Authorised Person if approved by the Regulator.
  - (d) The Authorised Person shall maintain at all times all prior authorisation necessary to issue immediately the relevant number of ordinary shares should the trigger event occur and the T2 Capital instruments be converted into ordinary shares.

- (e) Where an Authorised Person intends to include the T2 Capital instruments issued by a Subsidiary in a non-ADGM jurisdiction in the consolidated T2 Capital, the Authorised Person may do so, to the extent permitted under these Rules, if the provisions governing the instrument specify a trigger event equivalent to the trigger specified in paragraph (b) above, or where the trigger event relates to the supervisor of the Subsidiary deciding to make a public sector injection of capital or equivalent support, without which the Authorised Person would no longer be viable. The Regulator will only activate such triggers in respect of such Subsidiary, after consultation with the supervisor of the Subsidiary, where:
  - (i) if applicable, the Subsidiary is non-viable as determined by the supervisor of the Subsidiary in accordance with applicable laws of that jurisdiction on insolvency, resolution or recovery of financial institutions; and
  - (ii) the Authorised Person is, or would be, non-viable, as determined by the Regulator, as a result of providing, or committing to provide, a capital injection or similar support to the Subsidiary.
- (f) For the purposes of paragraph (e) above, any ordinary shares paid as compensation to the holders of the capital instrument shall be ordinary shares of either the Subsidiary or of the Authorised Person.
- (4) The following must apply where, in the case of a T2 Capital instrument, the conditions laid down in this Rule cease to be met:
  - (a) that instrument must cease to qualify as a T2 Capital instrument; and
  - (b) the part of the Share premium accounts that relates to that instrument must cease to qualify as a T2 Capital element.

### **Guidance**

Where the Regulator determines that certain conditions in relation to the viability of the institution are met, capital instruments eligible for inclusion in T2 Capital will be either partially or fully written down or converted into ordinary shares.

### **T2 regulatory deductions and exclusions**

**3.12.4** Subject to the following Rules in this Section, an Authorised Person must deduct the following from the calculation of its T2 Capital:

- (a) direct and indirect holdings by an Authorised Person of own T2 Capital instruments, including own T2 instruments that an Authorised Person could be obliged to purchase as a result of existing contractual obligations;
- (b) holdings of the T2 Capital instruments of Relevant Entities where those entities have a reciprocal cross holding with the Authorised Person which have the effect of artificially inflating the Capital Resources of the Authorised Person;

- (c) the amount of direct and indirect holdings by the Authorised Person of the T2 Capital instruments of Relevant Entities where the Authorised Person does not have a significant investment in those entities; and
- (d) direct and indirect holdings by the Authorised Person of the T2 Capital instruments of Relevant Entities where the Authorised Person has a significant investment in those entities, excluding Underwriting positions held for fewer than five working days.

### **T2 Deductions - holdings of own T2 Capital instruments**

**3.12.5** For the purposes of Rule 3.12.4(a), an Authorised Person must calculate holdings of its own T2 Capital instruments on the basis of the gross long positions subject to the following exceptions:

- (a) an Authorised Person must calculate the amount of holdings in the Trading Book on the basis of the net long position provided the long and short positions are in the same underlying Exposure and the short positions involve no Counterparty Credit Risk;
- (b) an Authorised Person must determine the amount to be deducted for indirect holdings in the Trading Book of own T2 Capital instruments that take the form of holdings of index Securities by calculating the underlying Exposure to own T2 Capital instruments in the indices; and
- (c) an Authorised Person must net gross long positions in own T2 Capital instruments in the Trading Book resulting from holdings of index Securities against short positions in own T2 instruments resulting from short positions in the underlying indices, including where those short positions involve Counterparty Credit Risk.

### **T2 Deductions - investments in T2 Capital instruments of Relevant Entities**

**3.12.6** For the purposes of Rules 3.12.4(b), (c) and (d), the amount of holdings of T2 Capital instruments and other capital instruments of Relevant Entities to be deducted must be calculated on the basis of the gross long positions.

**3.12.7** For the purposes of Rules 3.12.4(c) and (d), an Authorised Person must make the deductions in accordance with the following:

- (a) the holdings in the Trading Book of the capital instruments of Relevant Entities must be calculated on the basis of the net long position in the same underlying Exposure provided the maturity of the short position matches the maturity of the long position or has a residual maturity of at least one year; and
- (b) the amount to be deducted for indirect holdings in the Trading Book of the capital instruments of Relevant Entities that take the form of holdings of index Securities must be determined by calculating the underlying Exposure to the capital instruments of the Relevant Entities in the indices.

### **T2 deductions - insignificant investment in a Relevant Entity**

**3.12.8** (1) For the purposes of Rule 3.12.4(c), an Authorised Person must calculate the applicable amount to be deducted by multiplying the amount referred to in (a) by the factor derived from the calculation referred to in (b):



- (a) the amount referred to in Rule 3.10.16(1)(a);
  - (b) the amount of direct and indirect holdings by the Authorised Person of the T2 Capital instruments of Relevant Entities divided by the aggregate amount of all direct and indirect holdings by the Authorised Person of the CET1, AT1 and T2 Capital instruments of those Relevant Entities.
- (2) An Authorised Person must exclude Underwriting positions held for five working days or fewer from the amount referred to in Rule 3.10.16(1)(a) and from the calculation of the factor referred to in (1)(b).
- (3) An Authorised Person must determine the portion of holdings of T2 Capital instruments that is to be deducted by dividing the amount specified in (a) by the amount specified in (b):
- (a) the amount of holdings required to be deducted pursuant to (1)(a);
  - (b) the aggregate amount of direct and indirect holdings by the Authorised Person of the capital instruments of Relevant Entities in which the Authorised Person does not have a significant investment.

### **T2 Exclusion - Managing an unrestricted Profit Sharing Investment Account**

- 3.12.9** An Authorised Person must exclude from T2 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 the IFR rules.

### **3.13 Minority interests and instruments issued by Subsidiaries**

#### **Minority interests that qualify for inclusion in consolidated CET1 Capital**

- 3.13.1** Minority interests must include the CET1 Capital instruments, plus the related retained earnings and Share premium accounts of a Subsidiary, only where all of the following conditions are met:
- (a) the Subsidiary is one of the following:
    - (i) an Authorised Person; or
    - (ii) a regulated entity;
  - (b) the Subsidiary is a member of the Financial Group and included in the scope of consolidated supervision in accordance with Chapter 8; and
  - (c) those CET1 Capital instruments are owned by Persons other than the Undertakings included in the Financial Group.
- 3.13.2** Minority interests that are funded, directly or indirectly, through a Special Purpose Entity (SPE) or otherwise, by the Parent of the Authorised Person or any member of its Financial Group must not qualify for inclusion in the consolidated CET1 Capital of the Financial Group.

**3.13.3** An Authorised Person must determine the amount of minority interests of a Subsidiary that is eligible for inclusion in its consolidated CET1 Capital by subtracting from the minority interests of that Subsidiary the result of multiplying the amount referred to in (a) by the percentage referred to in (b):

- (a) the CET1 Capital of the Subsidiary minus the lesser of the following:
  - (i) the amount of CET1 Capital of that Subsidiary required to meet the sum of the Subsidiary's CET1 Capital requirement (on a solo basis) of 6.0% of its Total Risk Exposure Amount, calculated in accordance with Rule 3.5.7, and its Combined Buffer Requirement; or
  - (ii) the amount of consolidated CET1 Capital that relates to that Subsidiary that is required on a consolidated basis to meet the sum of its Financial Group's CET1 Capital requirement of 6.0% of its Total Risk Exposure Amount, calculated in accordance with Rule 3.5.7, and its Combined Buffer Requirement;
- (b) the minority interests of the Subsidiary expressed as a percentage of all CET1 Capital instruments of that Undertaking plus the related retained earnings and Share premium accounts.

#### **Qualifying AT1, T1, T2 Capital and qualifying Capital Resources**

**3.13.4** Qualifying AT1, T1, T2 Capital and qualifying Capital Resources must include the minority interest, AT1, T1 or T2 Capital instruments, as applicable, plus the related retained earnings and Share premium accounts of a Subsidiary only where the following conditions are met:

- (a) the Subsidiary is one of the following:
  - (i) an Authorised Person; or
  - (ii) a regulated entity;
- (b) the Subsidiary is a member of the Financial Group and included in the scope of consolidated supervision in accordance with Chapter 8; and
- (c) those instruments are owned by Persons other than the Undertakings included in the Financial Group.

#### **Qualifying AT1 and T2 Capital issued by a Special Purpose Entity**

**3.13.5** AT1 and T2 Capital instruments issued by an SPE, and the related retained earnings and Share premium accounts, may be included in qualifying AT1 or T2 Capital or qualifying Capital Resources, as applicable, only where the following conditions are met:

- (a) the SPE issuing those instruments is included fully in the Financial Group to which the Authorised Person belongs;
- (b) the instruments, and the related retained earnings and Share premium accounts, are included in qualifying AT1 Capital only where the conditions laid down in Rule 3.11.3(1) are satisfied;



- (c) the instruments, and the related retained earnings and Share premium accounts, are included in qualifying T2 Capital only where the conditions laid down in Rule 3.12.3(1) are satisfied; and
- (d) the only asset of the SPE is its investment in the Capital Resources of any of its Parents or their Subsidiaries, which are included fully in the Financial Group to which the Authorised Person belongs, the form of which satisfies the relevant conditions laid down in Rule 3.11.3(1) or Rule 3.12.3(1), as applicable.

### **Guidance**

If the Regulator considers the assets of an SPE to be minimal and insignificant for such an entity, the Regulator may consider waiving the condition specified in Rule 3.13.5(d).

### **Qualifying T1 Capital instruments included in consolidated T1 Capital**

**3.13.6** An Authorised Person must determine the amount of qualifying T1 Capital of a Subsidiary that is included in consolidated T1 Capital of the Authorised Person's Financial Group by subtracting from the qualifying T1 Capital of that Subsidiary the result of multiplying the amount referred to in (a) by the percentage referred to in (b):

- (a) the lesser of the following:
  - (i) the amount of T1 Capital of that Subsidiary required to meet the sum of the Subsidiary's T1 Capital requirement (on a solo basis) of 8.0% of its Total Risk Exposure Amount, calculated in accordance with Rule 3.5.7, and its Combined Buffer Requirement; or
  - (ii) the amount of consolidated T1 Capital that relates to the Subsidiary that is required on a consolidated basis to meet the sum of its Financial Group's T1 Capital requirement of 8.0% of the Total Risk Exposure Amount, calculated in accordance with Rule 3.5.7, and its Combined Buffer Requirement;
- (b) the qualifying T1 Capital of the Subsidiary expressed as a percentage of all T1 Capital instruments of that Subsidiary plus the related retained earnings and Share premium accounts.

### **Qualifying T1 Capital included in consolidated AT1 Capital**

**3.13.7** An Authorised Person must determine the amount of qualifying T1 Capital of a Subsidiary that is included in consolidated AT1 Capital by subtracting from the qualifying T1 Capital of that Subsidiary included in consolidated T1 Capital, the minority interests of that Subsidiary that are included in consolidated CET1 Capital.

### **Qualifying Capital Resources included in consolidated Capital Resources**

**3.13.8** An Authorised Person must determine the amount of qualifying Capital Resources of a Subsidiary that is included in consolidated Capital Resources of its Financial Group by subtracting from the qualifying Capital Resources of that Subsidiary, the result of multiplying the amount referred to in (a) by the percentage referred to in (b):

- (a) the lesser of the following:

- (i) the amount of Capital Resources of the Subsidiary required to meet the sum of the Subsidiary's total Capital Requirement (on a solo basis) of 10.0% of its Total Risk Exposure Amount, calculated in accordance with Rule 3.5.7 and its Combined Buffer Requirement; or
  - (ii) the amount of Capital Resources that relates to the Subsidiary that is required on a consolidated basis to meet the sum of its Financial Group's total Capital Requirement of 10.0% of its Total Risk Exposure Amount, calculated in accordance with Rule 3.5.7, and its Combined Buffer Requirement;
- (b) the qualifying Capital Resources of the Subsidiary, expressed as a percentage of all Capital Resources instruments of the Subsidiary that are included in its CET1, AT1 and T2 Capital items and the related retained earnings and Share premium accounts.

### **Qualifying Capital Resources instruments included in consolidated T2 Capital**

**3.13.9** An Authorised Person must determine the amount of qualifying Capital Resources of a Subsidiary that is included in consolidated T2 Capital by subtracting from the qualifying Capital Resources of that Subsidiary that are included in consolidated Capital Resources, the qualifying T1 Capital of that Subsidiary that is included in consolidated T1 Capital of the Financial Group of the Authorised Person.

### **3.14 Qualifying Holdings outside the financial sector**

- 3.14.1** (1) Where an Authorised Person has a Qualifying Holding in an Undertaking which is not one of the following:
- (a) an Undertaking that is a Relevant Entity; or
  - (b) an Undertaking that carries on activities that are:
    - (i) a direct extension of banking;
    - (ii) ancillary to banking; or
    - (iii) leasing, factoring, the management of unit trusts, the management of data processing services or any other similar activity,

and the amount of the holding exceeds 15% of the eligible total Tier 1 of the Authorised Person, the Authorised Person must comply with the requirements in (3).
- (2) The total amount of the Qualifying Holdings of an Authorised Person in those Undertakings referred to in (1) that exceeds 60% of its Tier 1 are subject to the requirements in (3).
- (3) An Authorised Person must apply a risk weight of 1000% to the greater of the total amount of Qualifying Holdings referred to in (1) and that in (2).

- (4) As an alternative to applying a 1000% risk weight to the amounts in excess of the limits specified in (1) or (2), an Authorised Person may deduct those amounts from CET1 Capital.
- (5) Shares of Undertakings to which (1) or (2) do not apply must not be included in calculating the eligible capital limits specified in (1) where any of the following conditions are met:
  - (a) those Shares are held temporarily during a financial reconstruction or rescue operation;
  - (b) the holding of the Shares is an Underwriting position held for five working days or less; or
  - (c) those Shares are held in the name of the Authorised Person on behalf of others.

### **3.15 Calculation of Capital Resources**

**3.15.1** This Section applies to an Authorised Person in any Category.

**3.15.2** The total of Capital Resources is derived according to the following formula:

$$\text{T1 Capital} + \text{T2 Capital} = \text{Capital Resources}$$

where:

- (a) "T1 Capital" represents Tier 1 capital, that being the sum of CET1 Capital and AT1 Capital;
- (b) "CET1 Capital" represents Common Equity Tier 1 capital assessed in accordance with Section 3.10;
- (c) "AT1 Capital" represents Additional Tier 1 capital assessed in accordance with Section 3.11; and
- (d) "T2 Capital" represents Tier 2 capital assessed in accordance with Section 3.12.

**3.15.3** An Authorised Person must calculate its Capital Resources in accordance with the table below and the provisions in Sections 3.9 to 3.12.

(A1) Elements of Common Equity Tier 1 (CET1) Capital
(A2) Adjustments to/deductions from CET1 Capital
<b>(A3) CET1 Capital = A1 – A2</b>
(A4) Elements of Additional Tier 1 (AT1) Capital
(A5) Deductions from AT1 Capital

<b>(A6) AT1 Capital = A4 – A5</b>
<b>(A7) Tier 1 (T1) Capital = A3 + A6</b>
(A8) Elements of Tier 2 (T2) Capital
(A9) Deductions from T2 Capital
<b>(A10) Tier 2 (T2) Capital = A8 – A9</b>
<b>(A11) Capital Resources = A7 + A10</b>

**3.15.4** The Capital Resources of an Authorised Person to which this section applies is defined as the sum of its CET1 Capital, AT1 Capital and T2 Capital.

### **3.16 Adequate Capital Resources for Categories 1, 2, 3A and 5**

#### **Application**

**3.16.1** This Section applies to an Authorised Person in Category 1, 2, 3A or 5.

#### **Capital ratios**

**3.16.2** Subject to 3.2.3, an Authorised Person must ensure that it complies with the following requirements at all times.

- (a) The ratio of CET1 Capital to Total Risk Exposure Amount must not be less than 6.0%.
- (b) The ratio of T1 Capital to Total Risk Exposure Amount must not be less than 8.0%.
- (c) The ratio of Capital Resources to Total Risk Exposure Amount must not be less than 10.0%.

#### **Guidance**

In Rule 3.16.2 CET1 Capital is that calculated at step A3, T1 Capital is that calculated at step A7 and Capital Resources is that calculated at step A11 of Rule 3.15.3.

**3.16.3** The Regulator may impose a further requirement, termed an Individual Capital Requirement (ICR), on an Authorised Person to hold additional Capital Resources arising from Pillar 2 adjustments (see Chapter 10). Where the Authorised Person has an ICR imposed on it, then the Authorised Person must, at all times, maintain adequate Capital Resources of the type and amount as specified in Rule 10.6.1 in addition to those kept to meet the capital adequacy requirements outlined in Rule 3.2.4.

### **3.17 Capital Conservation Buffer**

**3.17.1** This Section applies to an Authorised Person in Category 1, 2, or 5.

**3.17.2** Where, pursuant to Section 3.4, the Risk Capital Requirement forms the Capital Requirement of an Authorised Person, then that Authorised Person is subject to a Capital Conservation Buffer requirement.

**3.17.3** The Capital Conservation Buffer requirement is equivalent to 2.5% of the Total Risk Exposure Amount of an Authorised Person and must comprise only CET1 Capital.

**3.17.4** (1) An Authorised Person must maintain the required buffer amount, calculated in accordance with Rule 3.17.3, at all times.

(2) The Capital Conservation Buffer requirement applies on both a solo and a consolidated basis, for Authorised Persons forming part of Financial Groups.

**3.17.5** An Authorised Person must not use CET1 Capital that is kept to meet the Capital Conservation Buffer requirement towards meeting:

(a) its Total Risk Exposure Amount; or

(b) any Individual Capital Requirement as may be imposed pursuant to Chapter 10.

### **3.18 Countercyclical Capital Buffer**

**3.18.1** This Section applies to an Authorised Person in Category 1, 2 or 5.

**3.18.2** Where, pursuant to Section 3.4, the Risk Capital Requirement forms the Capital Requirement of an Authorised Person, then it is subject to a Countercyclical Capital Buffer requirement.

**3.18.3** (1) An Authorised Person must maintain the required buffer amount as CET1 Capital at all times, as calculated in accordance with Rule 3.18.4.

(2) The Countercyclical Capital Buffer requirement applies on both a solo and a consolidated basis, for Authorised Persons forming part of Financial Groups.

**3.18.4** An Authorised Person must calculate a Countercyclical Capital Buffer of CET1 Capital equal to its Total Risk Exposure Amount, calculated in accordance with Rule 3.5.7, multiplied by the weighted average of the Countercyclical Capital Buffer rates that apply to exposures in the jurisdictions where the Authorised Person's private sector credit exposures are located, calculated in accordance with Rules 3.18.5 to 3.18.8.

#### **Private sector credit exposures**

**3.18.5** Private sector credit exposures are those for which Credit RWAs have to be calculated in accordance with Chapter 4, other than those that fall into the following asset classes:

(a) Central government and central bank.

(b) Public sector enterprises.

- (c) Multilateral development bank (MDB).
- (d) International organisation.
- (e) Bank.

### **Guidance**

Exposures to banks with short-term credit assessments are not private sector credit exposures as they fall within the exempt asset class set out in Rule 3.18.5(e). However, exposures to non-bank entities with similar short-term credit assessments are private sector credit exposures for the purposes of Rule 3.18.5.

### **Weighted average of the Countercyclical Capital Buffer rates**

**3.18.6** The weighted average of the Countercyclical Capital Buffer rates shall be calculated by:

- (a) for each jurisdiction in which the Authorised Person has private sector credit exposures, dividing the Total Risk Exposure Amount that relates to the private sector credit exposures in that jurisdiction by the Total Risk Exposure Amount that relates to the Authorised Person's private sector credit exposures across all jurisdictions and multiplying it by the applicable Countercyclical Capital Buffer rate in that jurisdiction; and
- (b) summing those contributions across all jurisdictions.

### **Geographical location**

**3.18.7** For the purposes of the calculation of the weighted average of the applicable Countercyclical Capital Buffer rates an Authorised Person must identify, to the best of its ability, the geographical location of its private sector credit exposures as the jurisdiction where the underlying credit risk ultimately originates.

### **Countercyclical Capital Buffer rates**

**3.18.8** (1) For a private sector credit exposure located in ADGM or the UAE:

- (a) the Countercyclical Capital Buffer rate is the rate set by the Central Bank from time to time, subject to a maximum rate of 2.5%; and
- (b) any increase in the Countercyclical Capital Buffer rate specified by the Central Bank takes effect from the date specified by the Central Bank.

(2) For a private sector credit exposure located in a third country:

- (a) the Countercyclical Capital Buffer rate is:
  - (i) the rate set by the authority responsible for setting the Countercyclical Capital Buffer rate in that third country from time to time; or
  - (ii) 2.5% where the rate set by the third country rate setting authority exceeds 2.5%; or

- (iii) the rate set by the Central Bank where it sets a rate for a private sector credit exposure in the third country that exceeds that set by the third-country rate-setting authority, up to a maximum of 2.5%; or
    - (iv) zero where the third country rate setting authority has not set a Countercyclical Capital Buffer rate for that jurisdiction and the Central Bank does not specify such a rate; and
  - (b) any increase in the applicable Countercyclical Capital Buffer rate shall take effect from the date specified by the third country rate setting authority or the Central Bank, as appropriate;
- (3) Subject to (2)(a)(ii) and (iii) above for a private sector credit exposure in a third country, where a Countercyclical Capital Buffer rate for a jurisdiction is reduced that reduction shall take effect immediately.

### Guidance

An example of the calculation of the Countercyclical Capital Buffer follows, for an Authorised Person with private sector credit exposures in countries A, B and C of 60, 25 and 15 respectively, and where the applicable Countercyclical Capital Buffer rates are 2.0%, 1.0% and 1.5% respectively.

	Rule(s)	A	B	C	Total
Countercyclical Capital Buffer rate - applicable	3.18.8	2.0%	1.0%	1.5%	
Private sector credit exposures	3.18.5 and 3.18.7	60	25	15	100
Countercyclical Capital Buffer rate - weighted	3.18.6	1.20%	0.25%	0.225%	1.675%
Total Risk Exposure Amount	3.5.7(i)	100	60	40	200
<b>Countercyclical Capital Buffer</b>	<b>3.18.4</b>				<b>3.35</b>

**3.18.9** Countercyclical Capital Buffer rates shall apply from the date set by the Central Bank or the third country rate-setting authority.

### 3.19 Combined Buffer

**3.19.1** The Combined Buffer is the sum of the Capital Conservation Buffer and the Countercyclical Capital Buffer.

**3.19.2** An Authorised Person must not use CET1 Capital that is held to meet the Combined Buffer Requirement to meet:

- (a) its Capital Requirement;
- (b) any Individual Capital Requirement that may be imposed pursuant to Chapter 10; or
- (c) any other buffer, where applicable.



## **Guidance**

Where an Authorised Person does not hold sufficient dedicated CET1 Capital to meet the Combined Buffer Requirement it will be required to undertake remedial action in order to restore the level of CET1 Capital to the required level.

## **Restrictions on distributions**

**3.19.3** Where an Authorised Person fails to meet the Combined Buffer Requirement, it must:

- (a) calculate the maximum distributable amount in accordance with Rule 3.19.6; and
- (b) ensure that it does not undertake any of the following actions until such time as it has calculated the maximum distributable amount and notified the Regulator under Rule 3.19.7:
  - (i) make a distribution in connection with CET1 Capital, or create an obligation to pay variable remuneration or discretionary pension benefits, or pay variable remuneration if the obligation to pay was created at a time when the institution failed to meet its Combined Buffer Requirement; or
  - (ii) make payments on AT1 and T2 Capital instruments.

**3.19.4** An Authorised Person must:

- (a) in subsequently taking any of the actions described in Rule 3.19.3(b)(i) and (ii), after having calculated the maximum distributable amount and notified the Regulator, ensure that it distributes no more than its calculated maximum distributable amount; and
- (b) prepare and submit a capital conservation plan pursuant to Rule 3.19.9.

**3.19.5** For the purposes of Rule 3.19.3(b)(i), a distribution in connection with CET1 Capital includes any of the following:

- (a) payment of cash dividends;
- (b) distribution of fully or partly paid bonus Shares or other capital instruments;
- (c) a redemption or purchase by an institution of its own Shares or other capital instruments;
- (d) a repayment of amounts paid up in connection with capital; or
- (e) a distribution of other items referred to in Section 3.10 as eligible for inclusion as CET1 Capital.

**3.19.6** (1) In this Section, a reference to a "maximum distributable amount" means the maximum amount that an Authorised Person may distribute in connection with CET1 Capital as specified in Rules 3.19.3 and 3.19.4.



- (2) Subject to sub-paragraph (4), an Authorised Person must determine the maximum distributable amount by multiplying the sum specified in (a) by the factor determined under (b):
  - (a) the total of interim or year-end profits that were not included in CET1 Capital pursuant to Rule 3.10.2 and which have accrued after the most recent distribution of profits and after any of the actions referred to in Rule 3.19.3(b);
  - (b) where the CET1 Capital of the Authorised Person (which is not used to meet the Capital Requirement, including any Individual Capital Requirement as may be imposed pursuant to Chapter 10) falls:
    - (i) within the first quartile of the Combined Buffer Requirement, the factor shall be 0;
    - (ii) within the second quartile of the Combined Buffer Requirement, the factor shall be 0.2;
    - (iii) within the third quartile of the Combined Buffer Requirement, the factor shall be 0.4;
    - (iv) within the fourth quartile of the Combined Buffer Requirement, the factor shall be 0.6.
- (3) An Authorised Person must calculate the lower and upper bounds of each quartile of the Combined Buffer requirement as follows:
 

Lower bound of quartile =  $(\text{Combined Buffer Requirement} / 4) \times (Q_n - 1)$ ;

and

Upper bound of quartile =  $(\text{Combined Buffer Requirement} / 4) \times Q_n$ ,

where  $Q_n$  indicates the ordinal number of the quartile concerned.
- (4) If an Authorised Person undertakes any action under Rule 3.19.3(b), it must take that into account and reduce the maximum distributable amount accordingly.

### Guidance

The expression of both CET1 Capital and the Combined Buffer Requirement above is in absolute terms rather than as a percentage of the Total Risk Exposure Amount.

**3.19.7** For the purpose of Rule 3.19.3(b), where an Authorised Person intends to distribute any of its distributable profits or intends to undertake an action referred to in Rule 3.19.3(b)(i) or (ii), the Authorised Person must notify the Regulator and provide the following information:

- (a) the amount of capital maintained by the Authorised Person, subdivided as follows:
  - (i) CET1 Capital;
  - (ii) AT1 Capital; and

- (iii) T2 Capital;
- (b) the amount of its interim and year-end profits;
- (c) the maximum distributable amount calculated in accordance with Rule 3.19.6; and
- (d) the amount of distributable profits it intends to allocate between the following:
  - (i) dividend payments;
  - (ii) Share buybacks;
  - (iii) payments on AT1 Capital instruments; and
  - (iv) the payment of variable remuneration or discretionary pension benefits, whether by creation of a new obligation to pay, or by payment pursuant to an obligation to pay created at a time when the institution failed to meet its Combined Buffer Requirement.

### **Guidance**

Upon receiving a notification under this Rule, the Regulator will make an assessment of the firm's ability to meet and maintain its Capital Requirement on a sustainable basis going forward.

- 3.19.8** An Authorised Person must maintain systems and processes to ensure that the amount of distributable profits and the maximum distributable amount are calculated accurately, and must be able to demonstrate the accuracy of the calculations to the Regulator on request.

### **Capital conservation plan**

- 3.19.9** Where an Authorised Person fails to meet the Combined Buffer Requirement, it must prepare a capital conservation plan and submit it to the Regulator no later than five business days after it identified its failure to meet the Combined Buffer Requirement. The capital conservation plan must include the following:

- (a) estimates of income and expenditure and a forecast balance sheet;
- (b) measures to increase the CET1 Capital of the Authorised Person;
- (c) a plan and timeframe for the increase of CET1 Capital with the objective of restoring the Combined Buffer; and
- (d) any other information the Regulator might need in order to carry out its considerations referred to in Rule 3.19.10 effectively.

- 3.19.10** (1) Following assessment, the Regulator will approve the capital conservation plan only if it considers that the plan, if implemented, would be reasonably likely to conserve or raise sufficient CET1 Capital to enable the Authorised Person to meet its Combined Buffer Requirement, within a period that the Regulator considers appropriate.
- (2) If the Regulator does not approve the capital conservation plan, the Regulator may require the Authorised Person to increase its CET1 Capital

to meet the Combined Buffer Requirement, within a specified period of time. The Regulator may also impose more stringent restrictions on distributions than those imposed under Rule 3.19.3 where the capital conservation plan is not approved.

### **Guidance**

Where the Risk Capital Requirement forms the Capital Requirement of an Authorised Person in Category 1, 2, or 5 it should therefore hold sufficient total Capital Resources of the quality required to meet the following requirements:

- a. the capital ratios specified in Rule 3.16.2;
- b. any Individual Capital Requirement as may be imposed pursuant to Chapter 10;
- c. the Combined Buffer; and
- d. any other buffer, where applicable.

## **3.20 Adequate Capital Resources For Categories 3B, 3C and 4**

**3.20.1** This Section applies to an Authorised Person in Category 3B, 3C or 4.

### **Guidance**

1. Pursuant to Section 3.6 an Authorised Person in Category 3B, 3C or 4 should hold sufficient total Capital Resources of the quality required to meet its Capital Requirement, whether that is the Base Capital Requirement or the Expenditure Based Capital Minimum.
2. The Capital Resources should comprise a minimum of CET1 Capital equal to the relevant Base Capital Requirement for the Category to which the Authorised Person belongs.

### **Notifications to the Regulator**

**3.20.2** An Authorised Person in Category 3B, 3C or 4 must notify the Regulator immediately and confirm in writing if its Capital Resources fall below 120% of its Capital Requirement.

## **PART 5 - Leverage**

## **3.21 The Leverage Ratio**

**3.21.1** This Section applies to an Authorised Person in Category 1, 2 or 5.

### **Guidance**

1. This Section is relevant to an Authorised Person that is required to report its Leverage Ratio to the Regulator under Chapter 2, or to disclose its Leverage Ratio under Chapter 11.
2. The purpose of the Leverage Ratio is to provide a simple, transparent, non-risk-based methodology to act as a supplementary measure of risk, alongside the risk-based capital requirements applicable in ADGM.

3. "Leverage", in this context, means the relative size of (a) an institution's assets, off-balance sheet obligations and contingent obligations to pay or to deliver or to provide collateral, including obligations from received funding, made commitments, derivatives or repurchase agreements, but excluding obligations which can only be enforced during the liquidation of an institution; compared to (b) that institution's own funds.

**3.21.2** An Authorised Person must calculate its Leverage Ratio in accordance with the following methodology:

$$\text{Leverage Ratio} = \text{Capital Measure} \div \text{Exposure Measure}$$

where:

- (a) "Capital Measure" represents the Tier 1 Capital of the Authorised Person calculated in accordance with Rule 3.9.1; and
- (b) "Exposure Measure" represents the value of Exposures of the Authorised Person calculated in accordance with Rules 3.21.5 and 3.21.6.

**3.21.3** An Authorised Person must hold sufficient Tier 1 Capital to maintain, at all times, a minimum Leverage Ratio of 3% or as otherwise set by the Regulator.

**3.21.4** An Authorised Person must notify the Regulator immediately in writing if, at any time, it does not hold, or is likely not to hold, an amount and quality of capital that is necessary to comply with Rule 3.21.3.

### **Guidance**

Institutions shall calculate the Leverage Ratio as the simple arithmetic mean of the monthly leverage ratios over a quarter, or using a more frequent basis for the calculation if that is in line with their internal practices.

**3.21.5** For the purpose of determining the Exposure Measure, the value of Exposures of an Authorised Person must be calculated in accordance with the International Financial Reporting Standards (IFRS) subject to the following adjustments:

- (a) on-balance sheet, non-Derivative Exposures must be net of specific allowances and valuation adjustments (e.g. credit valuation adjustments);
- (b) physical or financial Collateral, guarantees or other credit risk mitigation techniques must not be used to reduce exposure values of assets; and
- (c) loans must not be netted with Deposits.

**3.21.6** The Exposure Measure under Rule 3.21.2(b) must be calculated as the sum of:

- (a) on-balance sheet items; and
- (b) off-balance sheet items.

### **Guidance**

1. In relation to on-balance sheet items:

- a. for SFTs, the Exposure value should be calculated in accordance with IFRS and the Netting requirements referred to in Rule 4.9.14;
  - b. for Derivatives, including written credit protection, the Exposure value should be calculated as the sum of the on-balance sheet value in accordance with IFRS and an add-on for potential future Exposure calculated in accordance with Rules A4.6.14 to A4.6.21 of App 4; and
  - c. for other on-balance sheet items, the Exposure value should be calculated based on their balance sheet values in accordance with Rule 4.9.3.
2. In relation to off-balance sheet items:
- a. for commitments that are unconditionally cancellable at any time by the Authorised Person without prior notice, the Exposure value should be the notional amount for the item multiplied by a CCF of 10%;
  - b. for short-term self-liquidating trade letters of credit arising from the movement of goods (e.g. documentary credits collateralised by the underlying shipment), the Exposure value should be the notional amount for the item multiplied by a CCF of 20% in relation to both issuing and confirming banks;
  - c. for certain transaction-related contingent items (e.g. performance bonds, bid bonds, warranties, and standby letters of credit related to particular transactions) the Exposure value should be the notional amount for the item multiplied by a CCF of 50%;
  - d. for note issuance facilities and revolving underwriting facilities, the Exposure value should be the notional amount for the item multiplied by a CCF of 50%;
  - e. for other off-balance sheet items, including:
    - i. direct credit substitutes;
    - ii. forward asset purchases, forward deposits and partly paid shares and securities which represent commitments with certain drawdown; and
    - iii. transactions, other than SFTs, involving the posting of Securities held by the Authorised Person as Collateral, the Exposure value should be the notional amount for each of the items multiplied by a CCF of 100%; and
  - f. where an Authorised Person has an undertaking to provide a commitment on an off-balance sheet item, an Authorised Person should apply the lower of the two applicable CCFs.
3. For an Islamic Financial Institution, assets corresponding to Unrestricted PSIAs will fall within the Exposure Measure and are therefore relevant to the Leverage Ratio calculation.

## **4 CREDIT RISK**

### **Introduction**

#### **Guidance**

1. Chapter 4 deals with the prudential requirements relating to the management of Credit Risk by an Authorised Person. Credit Risk refers to risk of incurring losses due to failure on the part of a borrower or a Counterparty to fulfil their obligations in respect of a financial transaction.
2. This Chapter aims to ensure that an Authorised Person holds sufficient regulatory capital of acceptable quality so that it can absorb unexpected losses arising out of its Credit Risk Exposures, should the need arise and that it continues to operate in a sustainable manner.
3. This Chapter requires an Authorised Person to:
  - a. appropriately apply a risk-weight to all on-balance sheet assets and off-balance sheet Exposures for capital adequacy purposes. A risk-weight is based on a Credit Quality Grade aligned with the likelihood of Counterparty default;
  - b. calculate the Credit Risk Capital Requirement for its on-balance sheet assets and off-balance sheet Exposures; and
  - c. reduce the Credit Risk Capital Requirement for its on-balance sheet assets and off-balance sheet Exposures where the Exposure is covered fully or partly by some form of eligible Credit Risk mitigant.
4. App4 provides detailed requirements, parameters, calculation methodologies and formulae in respect of the primary requirements outlined in Chapter 4.

### **PART 1 – Application**

#### **4.1 Application**

- 4.1.1** This Chapter applies to an Authorised Person in Category 1, 2, 3A or 5.

#### **Guidance**

1. This Chapter imposes systems and controls pertaining to Credit Risk, and prescribes the manner of calculation of the Credit Risk Capital Requirement (also referred to in these Rules as CRCOM).
2. Rules 3.5.1 and 3.5.2 provide that the CRCOM is a component in the calculation of the overall Risk Capital Requirement of an Authorised Person, and that the CRCOM is to be calculated in accordance with this Chapter.
3. The Rules in Section 4.8 provide that the Authorised Person's CRCOM is 10% of the Credit RWA of the firm, which in turn is calculated as the sum of:
  - a. the RWA for Credit Risk Exposures (CR Exposures);
  - b. the RWA for securitisation Exposures (SE Exposures); and

- c. the RWA for Counterparty Risk Exposures.
- 4. This Chapter sets out the manner in which each of those components must be calculated, monitored and controlled by an Authorised Person.
- 5. In addition to complying with the applicable Rules in this Chapter, an Authorised Person investing in or holding Islamic Contracts whether or not for the purpose of a PSIA will need to take account of the provisions under the IFR rules to calculate the associated capital requirements for Credit Risk for those Islamic Contracts.

## **PART 2 - Credit Risk systems and controls**

### **4.2 Application of this part**

- 4.2.1** This part applies to an Authorised Person in Category 1, 2, 3A or 5 with respect to both its Non-Trading Book and Trading Book transactions.

### **4.3 Credit Risk management systems**

- 4.3.1** An Authorised Person must implement and maintain comprehensive Credit Risk management systems which:
  - (a) are appropriate to the firm's type, scope, complexity and scale of operations;
  - (b) are appropriate to the diversity of its operations, including geographical diversity;
  - (c) enable the firm to effectively identify, assess, monitor and control Credit Risk and to ensure that adequate Capital Resources are available at all times to cover the risks assumed; and
  - (d) ensure effective implementation of the Credit Risk strategy and policy.

### **Guidance**

- 1. Credit Risk is the risk that a borrower or Counterparty fails to meet its obligations. Credit Risk exists in both the Non-Trading Book and the Trading Book, and both on and off the balance sheet of an Authorised Person.
- 2. Obviously, Credit Risk arises from loans but there are other sources of Credit Risk such as:
  - a. trade finance and acceptances;
  - b. interbank transactions;
  - c. commitments and guarantees;
  - d. interest rate, foreign exchange and Credit Derivatives (including swaps, Options, forward rate agreements and financial Futures);
  - e. bond and equity holdings; and
  - f. settlement of transactions.



3. The objective of the Credit Risk management system must be to ensure that every Authorised Person holds adequate capital to cover Credit Risk and absorb any potential losses arising from that risk. Since Authorised Persons need to provide credit as part of their usual business, this needs to be achieved by effectively managing the Credit Risk assumed by the Authorised Person as part of its credit business.
4. Failure to manage Credit Risk effectively could cause an Authorised Person to face a situation of inadequate capital, which would threaten its safety and soundness. Such problems normally arise from:
  - a. lax credit standards for borrowers and Counterparties;
  - b. poor portfolio risk management; and
  - c. failure to identify in good time changes in economic or other conditions that may impair the financial strength of borrowers and Counterparties.
5. Therefore, it is essential for Authorised Persons involved in the business of Providing Credit to design, implement and maintain comprehensive and effective systems to manage Credit Risk.

**4.3.2** The Credit Risk management framework of an Authorised Person must have at least the following principal elements effectively implemented to ensure that the Credit Risk Exposures of the Authorised Person are of a sufficiently good quality:

- (a) an appropriate Credit Risk environment, defined by a documented Credit Risk strategy and a documented Credit Risk policy;
- (b) application of the Credit Risk strategy and policy, where appropriate, on a consolidated basis and at the level of individual subsidiaries;
- (c) sound processes for assuming and managing Credit Risk;
- (d) prudent lending controls and limits, including policies and processes for monitoring Exposures in relation to limits, and approvals of exceptions to limits;
- (e) adequate appropriately skilled human resources to manage the Credit Risk function;
- (f) independence of credit approval and review functions from credit initiation functions to avoid any real or potential conflicts of interest;
- (g) prudent procedures for approving credits, defined by a documented credit procedures manual;
- (h) effective systems for credit administration, measurement and monitoring; and
- (i) adequate controls over Credit Risk.

**4.3.3** (1) An Authorised Person must ensure that its Governing Body retains responsibility for the Credit Risk management framework and ensure it is



appropriate for the nature, scale and complexity of operations, in the context of prevailing market and macro-economic conditions.

- (2) An Authorised Person must ensure that its senior management, or an appropriate designated body, regularly reviews and understands the implications as well as the limitations of the risk management information that they receive from the Credit Risk management function, in order to evaluate the suitability and effectiveness of such information in enabling them to provide effective oversight over the Credit Risk management function.
- (3) An Authorised Person must ensure that its Governing Body regularly reviews and understands the implications as well as the limitations of Credit Risk management information and reports presented to it, to ensure that the contents and the format of such reports are suitable for effective Governing Body oversight.
- (4) An Authorised Person must ensure that its Governing Body is responsible for carrying out regular stress testing on the credit portfolio which is appropriate for the nature, scale and complexity of the Credit Risks assumed by the Authorised Person. An Authorised Person must ensure that its Governing Body annually reviews the stress scenarios and takes action to address any perceived issues arising from those reviews.
- (5) An Authorised Person must establish and enforce internal controls and practices so that deviations from policies, procedures, limits and prudential guidelines are promptly reported to the appropriate level of management.

### **Guidance**

1. An Authorised Person may structure its credit processes and Credit Risk management function in a manner which suits its or its Group's internal organisational structure, culture and internal practices, provided the key functions and components relevant to Credit Risk management, as mentioned above, are present, and there must be adequate segregation of functions responsible for critical Credit Risk management processes. In particular, the credit initiation function must be independent of the credit approval and review functions to avoid any potential conflicts of interest. In cases where an Authorised Person finds it necessary to delegate small lending limits to staff in the front office for operational needs, there must be adequate safeguards, e.g. independent review of credits granted, to prevent abuse.
2. An Authorised Person's senior management or an appropriately delegated body (such as a credit committee) should be responsible for effectively implementing the Credit Risk strategy and policy approved by the Governing Body of the Authorised Person. Senior management or such a credit committee will need to establish adequate procedures to identify, quantify, monitor and control the Credit Risk inherent in the Authorised Person's activities and at the level of both the overall portfolio and individual borrowers/Counterparties.
3. 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 Person. For some Authorised Persons, a credit committee may be

appropriate, with formal terms of reference laid down. In other Authorised Persons, 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.

4. As part of its stress testing programme for Credit Risk measurement, an Authorised Person should take into account the realistic recoveries available from security or Collateral under stressed market and macro-economic conditions.
5. Rule 4.3.3(3) requires the Governing Body of an Authorised Person to review the management information reports presented to it by the senior management of that firm and assess the reports in respect of their utility and effectiveness in enabling the Governing Body to effectively discharge their responsibilities towards effective oversight of the firm and its Credit Risk management.

**4.3.4** An Authorised Person must also consider whether it is prudent to set out specific provisioning requirements for any country and transfer risks to which it is exposed.

#### **Guidance**

Guidance on country and transfer risk Exposure is set out in Section A4.1 (Credit Risk systems and controls) in App4.

**4.3.5** Where an Authorised Person avails itself of CRM, the Authorised Person must have mechanisms in place to regularly assess the net realisable value of such mitigations taking into account prevailing market conditions.

#### **Guidance**

1. Section 4.13 sets out the principles and methodologies for CRM recognition in the calculation of Credit RWA.
2. Further Guidance on Credit Risk systems and controls (including CRM), and on the specific areas which the Credit Risk policy should cover, is set out in Section A4.1.

### **4.4 Credit Risk strategy, policy, and procedures manual**

#### **Credit Risk strategy**

- 4.4.1**
- (1) An Authorised Person must implement and maintain a Credit Risk strategy, which prescribes its stated degree of risk tolerance, level of capital available for credit activities, business strategy for credit activities and Credit Risk management approach.
  - (2) The strategy must be:
    - (a) documented;
    - (b) approved by the Governing Body; and
    - (c) regularly reviewed and updated by the Authorised Person at periodic intervals and at least annually, as appropriate to the nature, scale and complexity of its activities.

## Guidance

1. An Authorised Person's Credit Risk strategy should reflect the aim to achieve sound credit quality while at the same time ensuring profit and business growth. Therefore the Credit Risk strategy should address the Authorised Person's approach towards the decision on an acceptable level of risk/reward relationship, after taking into account resource and capital costs.
2. An Authorised Person's Credit Risk strategy should allow for economic cycles and their effects on the credit portfolio during different stages of an economic cycle. For example, it should cater for a higher incidence of defaults in personal loan and credit card portfolios in times of economic recession.

## Credit Risk policy

- 4.4.2**
- (1) An Authorised Person must implement and maintain a Credit Risk policy which prescribes all the essential elements of the Credit Risk management system and associated processes.
  - (2) The policy must be:
    - (a) documented;
    - (b) approved by the Governing Body; and
    - (c) regularly reviewed and updated by the Authorised Person at periodic intervals and at least annually, as appropriate to the firm's current financial performance, credit market conditions in its main markets and its Capital Resources position as well the firm's nature, scale and complexity of its activities.
  - (3) Any changes to the Credit Risk policy and how exceptions to the policy will be dealt with must be approved by the Governing Body or an appropriately delegated committee of senior management (such as a credit committee).
  - (4) An Authorised Person with one or more branches outside the ADGM must implement and maintain Credit Risk policies adapted to each local market and its regulatory conditions.
- 4.4.3** The Credit Risk policy must:
- (a) be consistent with the approved Credit Risk strategy, considering a range of factors, including but not limited to an approved degree of risk tolerance, capital allocated to Credit Risk, business strategy and market conditions in its main credit markets;
  - (b) provide sound, well-defined Credit Risk norms and criteria for approval of credit applications;
  - (c) clearly specify Exposure limits, product types, business segments, nature of target borrowers and the nature of Credit Risk that the Authorised Person wishes to incur;
  - (d) set out, where appropriate, the amounts and terms and conditions under which Counterparties or clients may be eligible or ineligible for credit;

- (e) include minimum information that is required to be obtained for processing an application for credit;
- (f) include well-defined criteria and policies for approving new Exposures as well as renewing and refinancing existing Exposures, identifying the appropriate approval authority for the size and complexity of the Exposures;
- (g) include effective credit administration policies, including continued analysis of a borrower's ability and willingness to repay under the terms of the debt, monitoring of documentation, legal covenants, contractual requirements and Collateral, and a classification system that is consistent with the nature, size and complexity of the Authorised Person's activities or, at the least, with the asset grading system prescribed in Rule 4.5.4;
- (h) include comprehensive policies for reporting Exposures on an on-going basis;
- (i) include comprehensive policies for identifying and managing problem assets;
- (j) include a provisioning policy approved by the Governing Body which ensures that all loans are promptly and prudently provided for;
- (k) set out limits and approval processes involved for the approval of credit facilities that can be approved by the delegated authorities, and stipulate that the Governing Body retains responsibility for the governance of such limits;
- (l) require that major Credit Risk Exposures exceeding a specified amount or at a minimum all Large Exposures of the Authorised Person are approved by the Authorised Person's senior management or its designated body like credit committee; and
- (m) require that all Credit Risk Exposures that are especially risky or inconsistent with the approved credit strategy of the Authorised Person are approved by the Authorised Person's senior management or its designated body such as a credit committee.

**4.4.4** In relation to conflicts of interest and Related Person transactions, the policy must:

- (a) set out adequate procedures for handling conflicts of interest 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;
- (b) subject to Rule 4.4.5, prohibit Exposures to Related Persons on terms that are more favourable than those available to Persons who are not Related Persons; and
- (c) if Exposures to Related Persons are allowed on terms which are no more favourable than those available to Persons who are not Related Persons, set 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 Person, to be made subject to the prior written approval of the 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.

**4.4.5** The prohibition in Rule 4.4.4(b) 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 Person;
- (b) is approved by the Authorised Person'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.

#### **Guidance**

1. The requirements in these Rules do not prevent arrangements such as Employee loan schemes that allow more favourable and flexible loan terms to Employees of the Authorised Person 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 interest 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.
2. Generally, where an Authorised Person has an Employee loan scheme under these Rules, the Regulator 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 Person should also be able to demonstrate to the Regulator that the procedures it has adopted relating to an Employee loan scheme are adequate to address any risks arising from such lending. The Regulator 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 Regulator under GEN.

**4.4.6** For the purposes of the Rules in this Chapter, a Person is a "Related Person" of an Authorised Person if the Person:

- (a) is, or was in the past two years:

- (i) a member of a Group or Partnership in which the Authorised Person is or was also a member; or
  - (ii) a Controller of the Authorised Person or a Close Relative of such a Controller;
- (b) is, or was in the past two years, a Director, Partner or senior manager of the Authorised Person 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 Person 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 Partnerships Act or any similar limited Partnership constituted under the law of a country or territory outside the ADGM.

### **Credit procedures manual**

**4.4.7** An Authorised Person must implement and maintain a documented credit procedures manual, which sets out the criteria and procedures for granting new credits, for approving extensions of existing credits and exceptions, for conducting periodic and independent reviews of credits granted and for maintaining the records for credits granted.

**4.4.8** The credit procedures manual must establish:

- (a) sound, well-defined criteria for granting credit, including a thorough understanding of the borrower or Counterparty, the purpose and structure of the credit and its source of repayment;
- (b) well-defined processes for approving new Exposures as well as renewing and refinancing existing Exposures;
- (c) effective credit administration processes, including continued analysis of a borrower's ability and willingness to repay under the terms of the debt, monitoring of documentation, legal covenants, contractual requirements and Collateral;
- (d) effective processes for classification and grading of credit assets consistent with the nature, size and complexity of the Authorised Person's activities;
- (e) comprehensive processes for reporting Exposures on an ongoing basis; and
- (f) comprehensive processes for identifying problem assets, managing problem assets, monitoring their collections and for estimating the required level of provisions.



**Guidance**

The same criteria should be applied to both advised and unadvised facilities and should deal with all Credit Risks associated with the Authorised Person's business whether in the Non-Trading or Trading Book or on or off balance sheet.

**4.5 Processes for credit assessment**

- 4.5.1** (1) When utilising external credit rating agencies as part of its credit assessment processes, an Authorised Person must:
- (a) maintain an internal credit grading system; and
  - (b) stress test its capital position on at least an annual basis to consider the capital implications to the Authorised Person of a significant reduction in the credit quality and associated reduction on credit ratings from credit rating agencies for its credit portfolio.
- (2) An Authorised Person must not solely use external credit rating agency credit ratings as a basis for its assessment of the risks associated with an Exposure, in particular in respect of a Large Exposure, and must at all times conduct its own credit assessment of such an Exposure.

**Guidance**

An Authorised Person should closely monitor the adequacy of the internal credit assessment processes, in order to assess whether there is an upward bias in internal ratings.

- 4.5.2** An Authorised Person must implement and maintain appropriate policies, processes, systems and controls to:
- (a) administer its credit portfolios, including keeping the credit files current, getting up-to-date financial information on borrowers and other Counterparties, funds transfer, and electronic storage of important documents;
  - (b) ensure that the valuations of Credit Risk mitigants employed by the Authorised Person are up-to-date, including periodic assessment of Credit Risk mitigants such as guarantees and Collateral;
  - (c) review all material concentrations in its credit portfolio and report the findings of such reviews to the Governing Body; and
  - (d) measure Credit Risk (including to measure Credit Risk of off-balance sheet products such as Derivatives in credit equivalent terms) and monitor the condition of individual credits to facilitate identification of problem credits and to determine the adequacy of provisions and reserves.
- 4.5.3** The Credit Risk management system and, in particular, the systems, policies and processes aimed at classification of credits, monitoring and identification of problem credits, management of problem credits and provisioning for them must include all the on-balance sheet and off-balance sheet credit Exposures of the Authorised Person.

## Guidance

An Authorised Person should ensure that its loan portfolio is properly classified and has an effective early-warning system for problem loans.

- 4.5.4** (1) An Authorised Person must establish clearly defined criteria for identifying its problem credits and/or impaired assets which ensure that credits are classified as impaired in all cases where there is some reason to believe that all amounts due (including principal and interest) will, or may, not be collected in accordance with the contractual terms of the loan agreement.
- (2) For the purpose of (1), and subject to (3), an Authorised Person must categorise its credits into five categories as detailed in the following table, where credits in the substandard, doubtful and loss categories must be considered as problem credits:

Category	Criteria
Standard	Includes credits with no element of uncertainty about timely repayment of the outstanding amounts, including principal and interest. Credits are currently in regular payment status with prompt payments.
Special mention	Includes credits with deteriorating or potentially deteriorating credit quality which, may adversely affect the borrower's ability to make scheduled payments on time. The credits in this category warrant close attention by the Authorised Person.
Substandard	Includes credits which exhibit definitive deterioration in credit quality and impaired debt servicing capacity of the borrower.
Doubtful	Includes credits which show strong credit quality deterioration, worse than those in substandard category, to the extent that the prospect of full recovery of all the outstanding amounts from the credit is questionable and consequently the probability of a credit loss is high, though the exact amount of loss cannot be determined yet.
Loss	Includes credits which are assessed as uncollectable and credits with very low potential for recoverability of amounts due.

- (3) An Authorised Person may also have in place a more detailed credit grading system provided it can address the categories detailed in (2).

## Guidance

1. With respect to the ratings above, Authorised Persons should consider the following Exposures as being classified:
  - (i) special mention;
  - (ii) substandard;



(iii) doubtful; and

(iv) loss

where the loans are contractually in arrears for a minimum number of days of 30, 60, 90 – 120 and 120 – 180 days respectively. Authorised Persons should also consider the treatments as set out in Rule 4.5.7 (Evergreening).

2. Credits exhibiting the following characteristics should be included in the special mention category.

- a. a declining trend in the operations of the borrower or in the borrower's ability to continue to generate cash required for repayment of the credit;
- b. any signals which indicate a potential weakness in the financial position of the borrower, but not to the point at which repayment capacity is definitely impaired; or
- c. business, economic or market conditions that may unfavourably affect the profitability and business of the borrower in the near to medium term.

3. Credits exhibiting the following characteristics should be included in the substandard category.

- a. inability of the borrower to meet contractual repayment terms of the Credit Facility;
- b. unfavourable economic and market conditions or operating problems that would affect the profitability and cash flow generation of the borrower;
- c. weak financial condition or the inability of the borrower to generate sufficient cash flow to service the payments;
- d. difficulties experienced by the borrower in servicing its other debt obligations; or
- e. breach of any financial covenants by the borrower.

**4.5.5** An Authorised Person must have detailed policies, processes and resources for managing problem credits which address the following:

- (a) monitoring of credits and early identification of credit quality deterioration;
- (b) review of classification of problem credits; and
- (c) ongoing oversight of problem credits, and for collecting on past due obligations.

**4.5.6** An Authorised Person must ensure that each and every credit which qualifies as a Large Exposure and is classified as an impaired credit is managed individually. This includes valuation, classification and provisioning for such credits on an individual item basis.

- 4.5.7** Any Evergreening exercise involving refinancing of past due credits must not result in their being classified as a higher category. In particular, impaired credits cannot be refinanced with the aim of classifying them as standard or special mention credits.
- 4.5.8** An Authorised Person's provisioning policy must specify the following minimum provisioning requirements:
- (a) for substandard assets – 20% of the unsecured portion of the credit;
  - (b) for doubtful assets – 50% of the unsecured portion of the credit; and
  - (c) for loss assets – 100% of the unsecured portion of the credit.
- 4.5.9** An Authorised Person must, on a periodic basis, at a minimum monthly frequency, review its problem credits (at an individual level or at a portfolio level for credits with homogeneous characteristics) and review the asset classification, provisioning and write-offs for each of those problem credits.

### **PART 3 - CRCOM**

## **4.6 Application**

### **Guidance**

1. As indicated in Rule 4.1.1, this Chapter 4 (including this Part 3) applies to Authorised Persons in Categories 1, 2, 3A and 5. However, the provisions in this part are applied in a differentiated manner in that Category 3A firms must, and Category 2 firms may, use the Simplified Approach under Section 4.7.
2. The Credit Risk Capital Requirement (also referred to in these Rules as CRCOM) is a component of the calculation of the overall Capital Requirement of an Authorised Person, as provided in Rules 3.5.1 and 3.5.2. The Rules in this Part 3, supplemented by App4, govern the manner of calculation of the CRCOM.

## **4.7 Simplified Approach**

### **Category 3A firms**

- 4.7.1** (1) This Rule applies only to an Authorised Person in Category 3A.
- (2) Subject to (3) and (4), an Authorised Person must apply the Simplified Approach as prescribed in Section A4.12 in App4.
  - (3) An Authorised Person is not required to apply the Simplified Approach if it obtains prior written approval of the Regulator not to do so.
  - (4) After obtaining approval under (3), a firm must not revert to the Simplified Approach without obtaining further prior written approval from the Regulator.

### **Guidance**

1. In effect, the Simplified Approach reduces undue regulatory burden on Category 3A firms to reflect more appropriately their risk profile.

2. In relation to (3) and (4), the Regulator may consider granting its approval for a change of approach if it is satisfied that there are no regulatory capital arbitrage opportunities. Firms should be able to demonstrate to the Regulator solid and reasonable grounds to be able to move from one approach to the other. For instance, in assessing whether or not to grant approval, the Regulator may consider whether or not there has been a material change in the business of the firm.

### **Category 2 firms**

- 4.7.2**
- (1) This Rule applies only to an Authorised Person in Category 2.
  - (2) Subject to (3) and (4), an Authorised Person may apply the Simplified Approach, as prescribed in Section A4.12 in App4, upon obtaining the prior written approval to do so from the Regulator.
  - (3) After obtaining approval under (2), a firm must not disapply the Simplified Approach without further prior written approval from the Regulator.
  - (4) The Regulator may revoke its approval under (2) and require a firm to disapply the Simplified Approach, if the Regulator considers that this is warranted by the firm's business model and risk profile.

### **Guidance**

In relation to (3) and (4), the Regulator may consider granting its approval for a change of approach if it is satisfied that there are no regulatory capital arbitrage opportunities. Firms should be able to demonstrate to the Regulator reasonable grounds to be able to move from one approach to the other. For instance, in assessing whether or not to grant approval, the Regulator may consider whether or not there has been a material change in the business of the firm.

## **4.8 Calculation of the CRCOM**

- 4.8.1**
- (1) The Credit Risk Capital Requirement is calculated as follows:  $\text{CRCOM} = 10\% \times \text{Credit RWA}$
  - (2) The Credit RWA of an Authorised Person is the sum of:
    - (a) its risk weighted assets (RWA) for all its Credit Risk Exposures (referred to in these Rules as "CR Exposures") calculated in accordance with Rules 4.8.2 and 4.8.3;
    - (b) its RWA for all its securitisation Exposures (referred to in these Rules as "SE Exposures") calculated in accordance with Rule 4.8.4 and Section 4.14; and
    - (c) its RWA for its Counterparty Risk Exposures as calculated in accordance with Sections A4.6 to A4.8.

### **Calculation of RWA for Credit Risk Exposures (CR Exposures)**

- 4.8.2** An Authorised Person must include in its calculation of RWA for CR Exposures:
- (a) any on-balance sheet asset; and

- (b) any off-balance sheet item; but excluding:
- (c) any SE Exposure;
- (d) any securitised Exposure that meets the requirements for the recognition of risk transference in a Traditional Securitisation set out in Section 4.14; and
- (e) any Exposure classified as a position or instrument in the Trading Book in accordance with Section A2.1.

**4.8.3** To calculate its RWA for CR Exposures, an Authorised Person must:

- (a) calculate the value of the Exposure (represented as "E") for every on-balance sheet and every off-balance sheet asset in accordance with the Exposure measurement methodology specified in Section 4.9 and recognising the effects of any applicable CRM;
- (b) categorise that Exposure in accordance with the Rules in Section 4.10;
- (c) allocate an applicable Credit Quality Grade and risk weight for that Exposure in accordance with the Rules in Section 4.11 and 4.12;
- (d) calculate the RWA amount for that Exposure using the following formula:  

$$RWA(CR) = E \times CRW$$

where:

- (i) "RWA(CR)" refers to the risk-weighted Exposure amount for that CR Exposure;
- (ii) "E" refers to the Exposure value or amount, for that CR Exposure; and
- (iii) "CRW" refers to the applicable risk weight for that CR Exposure determined in accordance with (b) and (c); and
- (e) add the RWA amounts calculated in accordance with (d) for all its CR Exposures.

**Calculation of RWA for securitisation Exposures (SE Exposures)**

**4.8.4** To calculate its RWA for all its SE Exposures, an Authorised Person must:

- (a) calculate the value of the Exposure for each of its SE Exposures in accordance with Exposure measurement methodology specified in Section 4.9 and recognising the effects of any applicable CRM;
- (b) allocate an applicable Credit Quality Grade for that SE Exposure in accordance with the Rules in Section 4.11;
- (c) calculate the RWA amount for each SE Exposure, except for those SE Exposures which the Authorised Person is required to include as deductions from any component of Capital Resources, using the following formula:  

$$RWA(SE) = SE \times CRW$$

where:

- (i) "RWA(SE)" refers to the risk-weighted Exposure amount for that securitisation Exposure;
  - (ii) "SE" refers to the Exposure value or amount for that SE Exposure calculated in accordance with (a); and
  - (iii) "CRW" refers to the applicable risk weight for that SE Exposure determined in accordance with (b); and
- (d) add the RWA amounts calculated in accordance with (c) for all its SE Exposures to the RWA amounts calculated in accordance with Rule 4.8.5 in respect of its Early Amortisation Exposures.

**4.8.5** To calculate its RWA for Early Amortisation Exposures, an Authorised Person must:

- (a) calculate the value of the Exposure (EAE) for each of its Early Amortisation Exposures in accordance with Exposure measurement methodology specified in Section 4.9 and recognising the effects of any applicable CRM;
- (b) calculate the risk-weighted Exposure amount for each Early Amortisation Exposure using the following formula:  $RWA(EAE) = EAE \times CRW$

where:

- (i) "RWA(EAE)" refers to the risk-weighted Exposure amount for that Early Amortisation Exposure;
  - (ii) "EAE" refers to the Exposure value or amount, for that Early Amortisation Exposure calculated in accordance with (a); and
  - (iii) "CRW" refers to the applicable risk weight for the underlying Exposure type as if the Exposure had not been securitised; and
- (c) add the RWA amounts calculated in accordance with (b) for all its Early Amortisation Exposures.

**4.8.6** The aggregate RWA amount for all of the SE Exposures of an Authorised Person to a securitisation and Exposures arising from CRM applied to those SE Exposures must not exceed the aggregate RWA amount corresponding to the underlying Exposures of the securitisation had they been on the balance sheet of the Authorised Person and included in the calculation of the Credit RWA of the Authorised Person. For avoidance of doubt, the aggregate RWA amount must not include any deduction for a gain-on-sale or a Credit-Enhancing Interest-Only Strip arising from the securitisation.

## **4.9 Methodology for measurement of Exposures**

**4.9.1** An Authorised Person must apply the Exposure measurement methodology set out in the Rules in this part to calculate the value or amount of an Exposure for any CR Exposure or SE Exposure.

### **Guidance**

1. The measurement methodology in this Section prescribes the manner of calculation of Exposures for the purpose of determining the Credit RWA for

Credit Risk (CR) Exposures as provided in Rule 4.8.3 and for securitisation (SE) Exposures as provided in Rule 4.8.4.

2. Due regard should be given to the Guidance relating to prudent valuation in Section 2.4 and related provisions in App2.5.
3. An Authorised Person should consult with the Regulator on the appropriate treatment to apply in the measurement of E, for transactions that have not been addressed in this part.

**4.9.2** An Authorised Person must calculate E for any CR Exposure or SE Exposure, net of any individual impairment provision attributable to such Exposures, as determined in accordance with the International Financial Reporting Standards.

#### **Measurement of E for on-balance sheet assets**

**4.9.3** For each on-balance sheet asset, E should be the Carrying Value of the asset.

#### **Guidance**

1. For any asset, E should be equal to the fair value of that asset presented in the balance sheet, except that:
  - a. for any asset held at cost, E should be equal to the cost of the asset presented in the balance sheet; and
  - b. for any available-for-sale (AFS) debt security or AFS loan, E, should be equal to the fair value less provision for impairment of that AFS debt security or AFS loan, adjusted by deducting any unrealised fair value gains and adding back any unrealised fair value losses on revaluation (broadly equivalent to the amortised cost of the AFS debt security or AFS loan less any provision for impairment).
2. In the case of a lease where the Authorised Person is exposed to residual value risk (i.e. potential loss due to the fair value of the leased asset declining below the estimate of its residual value reflected on the balance sheet of the Authorised Person at lease inception), the Authorised Person should calculate (i) an Exposure to the lessee equivalent to the discounted lease payment stream; and (ii) an Exposure to the residual value of the leased assets equivalent to the estimate of the residual value reflected in the balance sheet of the Authorised Person.
3. Any foreign exchange transaction or translation gain or loss from a foreign currency-denominated on-balance sheet item as well as interest earned on a fixed income instrument should be allocated to the Exposure to which it accrues.

#### **Measurement of E for off-balance sheet items other than Counterparty Risk Exposures**

**4.9.4** (1) For each off-balance sheet item other than a pre-settlement Counterparty Exposure arising from an OTC Derivative transaction, long settlement transaction or Securities Financing Transaction (referred to in these Rules as an "SFT") an Authorised Person must calculate E by:

- (a) in the case of an Early Amortisation Exposure, multiplying the amount of investors' interest by the applicable CCF set out in Rules A4.2.1 and A4.2.2 in App4; and
- (b) in all other cases, multiplying the notional amount of each item by:
  - (i) the applicable CCF set out in Rule A4.2.1 in App4 if that item is a CR Exposure; or
  - (ii) the applicable CCF set out in Rule A4.2.2 in App4 if that item is an SE Exposure.

### **Guidance**

1. An Authorised Person which is exposed to the risk of the underlying Securities in an OTC Derivative transaction, long settlement transaction or SFT which is in substance similar to a forward purchase or credit substitute should calculate E, for such an Exposure, in accordance with Rule 4.9.4(1).
2. Investors' interest is defined as the sum of:
  - a. investors' drawn balances related to the securitised Exposures; and
  - b. E associated with investors' undrawn balances related to the SE Exposures. E is determined by allocating the undrawn balances of securitised Exposures on a pro-rata basis based on the proportions of the Originator's and investor Shares of the securitised drawn balances.
3. For avoidance of doubt, where an Authorised Person has provided unfunded credit protection via a total rate of return swap, E should be equal to the notional amount of the underlying reference credit for which the Authorised Person is providing protection adjusted for any payments received from or made to the protection buyer and recognised in the profit and loss account of the Authorised Person. Where an Authorised Person has provided unfunded credit protection via a credit default swap, E should be equal to the notional amount of the underlying reference credit for which the Authorised Person is providing protection.
4. The notional amount of an off-balance sheet item refers to the amount which has been committed but is as yet undrawn. The amount to which the CCF is applied is the lower of the value of the unused committed credit line, and the value which reflects any possible constraining availability of the facility, such as the existence of a ceiling on the potential lending amount which is related to an obligor's reported cash flow. If the facility is constrained in this way, the Authorised Person must have sufficient line monitoring and management procedures to support this contention.
5. Any foreign exchange transaction or translation gain or loss from a foreign currency-denominated off-balance sheet item should be allocated to the Exposure to which it accrues.



### **Recognition of eligible financial Collateral for on-balance sheet assets and off-balance sheet items other than Counterparty Exposures**

- 4.9.5** (1) An Authorised Person which has taken eligible financial Collateral for any transaction other than an equity Exposure, an SE Exposure, an OTC Derivative transaction, long settlement transaction or SFT may recognise the effect of such Collateral in accordance with Rules 4.9.6 and 4.9.7.
- (2) An Authorised Person must use either the:
- (a) Financial Collateral Simplified Approach (FCSA) which adopts the treatment under Rule 4.13.5 in relation to the composition of financial Collateral; or
  - (b) Financial Collateral Comprehensive Approach (FCCA) which adopts the treatment under Rule 4.13.6;
- to recognise the effect of eligible financial Collateral.
- (3) An Authorised Person must apply the chosen approach consistently to its entire Non-Trading Book and must not use a combination of both approaches.

**4.9.6** An Authorised Person using the FCSA may recognise the effect of eligible financial Collateral in accordance with the Rules in Section 4.13.

**4.9.7** An Authorised Person using the FCCA may calculate the CR Exposure adjusted for eligible financial Collateral (referred to in these Rules as "E\*"), in accordance with Rules in Section A4.3 of App4 and substitute E\* for E when calculating the Credit Risk-weighted Exposure amount for that CR Exposure under Section 4.8.

### **Recognition of eligible financial Collateral for securitisation (SE) Exposures**

**4.9.8** An Authorised Person that has taken eligible financial Collateral for an SE Exposure may recognise the effect of such Collateral in accordance with Rules 4.9.9 to 4.9.11.

**4.9.9** An Authorised Person calculating RWAs for SE Exposures must use either the FCSA or the FCCA approaches to recognise the effect of eligible financial Collateral. An Authorised Person must apply the chosen approach consistently to the entire Non-Trading Book and must not use a combination of both approaches.

**4.9.10** An Authorised Person using the FCSA approach for an SE Exposure may recognise the effect of eligible financial Collateral in accordance with Section 4.13 and Rule 4.14.70.

**4.9.11** An Authorised Person using the FCCA approach for an SE Exposure must calculate E\*, the SE Exposure adjusted for eligible financial Collateral, in accordance with Rules in Section A4.3 of App4 and substitute E\* for E when calculating the RWA for SE Exposure under Section 4.8.

### **Measurement of E for Counterparty Exposures**

#### **Guidance**

Rules 4.19.12 to 4.19.21 should be read in conjunction with Sections A4.6 to A4.8.



### **Measurement of E for Counterparty Exposures arising from OTC Derivative transactions and long settlement transactions**

- 4.9.12** For each OTC Derivative transaction or long settlement transaction which is not covered by a qualifying cross-product Netting agreement, an Authorised Person should calculate E for the pre-settlement Counterparty Exposure arising from that OTC Derivative transaction or long settlement transaction using the method set out in Sections A4.6 to A4.8.

### **Measurement of E for pre-settlement Counterparty Exposures arising from SFTs**

- 4.9.13** An SFT must be treated as collateralised lending, notwithstanding the wide range of structures which could be used for SFTs.
- 4.9.14** An Authorised Person must calculate E, for a pre-settlement Counterparty Exposure arising from an SFT, other than an Exposure covered by a qualifying cross-product Netting agreement, in accordance with Rules 4.9.15 to 4.9.20.
- 4.9.15** An Authorised Person must determine E, for a pre-settlement Counterparty Exposure arising from an SFT which is not covered by a qualifying cross-product Netting agreement as follows:
- (a) in the case where the Authorised Person has lent Securities to a Counterparty or sold Securities to a Counterparty with a commitment to repurchase those Securities at a specified price on a specified future date, the latest fair value of the Securities lent or sold; and
  - (b) in the case where the Authorised Person has lent cash to a Counterparty through the borrowing of Securities from the Counterparty or paid cash for the purchase of Securities from a Counterparty with a commitment to resell those Securities at a specified price on a specified future date, the amount of cash lent or paid.
- 4.9.16** An Authorised Person which has taken eligible financial Collateral for any SFT where the pre-settlement Counterparty Exposure is determined in accordance with Rule 4.9.15 may recognise the effect of such Collateral in accordance with Rules 4.9.17 to 4.9.20.
- 4.9.17** An Authorised Person must use either the FCSA or the FCCA to recognise the effect of eligible financial Collateral for any SFT in the Non-Trading Book. The Authorised Person must apply the chosen approach consistently to the entire Non-Trading Book and must not use a combination of both approaches. For a pre-settlement Counterparty Exposure arising from any SFT in the Trading Book, an Authorised Person must only use the FCCA to recognise the effect of eligible financial Collateral.
- 4.9.18** An Authorised Person using the FCSA may recognise the effect of eligible financial Collateral for any SFT in accordance with Rules A4.3.27 to A4.3.29 in App4.
- 4.9.19** An Authorised Person which has taken eligible financial Collateral for any SFT that is not covered by a qualifying bilateral Netting agreement and using the FCCA, must calculate E\* in accordance with Rules A4.3.2 to A4.3.6 in App4, and substitute E\* for E when calculating the Credit Risk-weighted Exposure amount for that CR Exposure under Section 4.8.

- 4.9.20** An Authorised Person which has taken eligible financial Collateral for an SFT that is covered by a qualifying bilateral Netting agreement and using the FCCA, must calculate  $E^*$  for all its CR Exposures to any single Counterparty covered by the qualifying bilateral Netting agreement, in accordance with Rules A4.3.2 to A4.3.6 in App4 (if the Authorised Person is using supervisory haircuts or own-estimate haircuts), and substitute  $E^*$  for  $E$  when calculating the Credit Risk-weighted Exposure amount for its CR Exposures to that Counterparty under Section 4.8.

### **Exceptions to the measurement of E**

- 4.9.21** An Authorised Person may attribute a value of zero to  $E$  for:
- (a) any pre-settlement Counterparty Exposure arising from any Derivative transaction or SFT outstanding with a central counterparty and which has not been rejected by that central counterparty, provided that the Exposure is fully collateralised on a daily basis;
  - (b) any Credit Risk Exposure arising from any Derivative transaction, SFT or spot transaction which an Authorised Person has outstanding with a central counterparty for which the latter acts as a custodian on the Authorised Person's behalf, provided that the Exposure is fully collateralised on a daily basis;
  - (c) any pre-settlement Counterparty Exposure arising from any Credit Derivative which an Authorised Person may recognise as eligible credit protection for a Non-Trading Book Exposure or another CR Exposure; and
  - (d) any pre-settlement Counterparty Exposure arising from any sold credit default swap in the Non-Trading Book, where the credit default swap is treated as credit protection sold by the Authorised Person.

### **Guidance**

Credit Risk (CR) Exposures outstanding with a central counterparty would, for example, include credit Exposures arising from monies placed and from Collateral posted, with the Counterparty.

## **4.10 Categorisation of Credit Risk Exposures (CR Exposures)**

### **Guidance**

This Section categorises Exposures for the purpose of determining the CRW for CR Exposures, as provided in Rule 4.8.3.

- 4.10.1** An Authorised Person must categorise any CR Exposure that is not past due for more than 90 days into one of the following asset classes:
- (a) cash items, which consist of:
    - (i) cash and cash equivalents;
    - (ii) gold bullion held in the vaults of the Authorised Person or on an allocated basis in the vaults of another entity to the extent that it is backed by gold bullion liabilities; and

- (iii) all receivable funds arising from transactions that are settled on a DvP basis which are outstanding up to and including the 4<sup>th</sup> business day after the settlement date;
- (b) central government and central Bank asset class, which consists of any CR Exposure to a central government or central bank;
- (c) the PSE asset class, which consists of any CR Exposure to a PSE;
- (d) the MDB asset class, which consists of any CR Exposure to an MDB;
- (e) bank asset class, which consists of any CR Exposure to a banking institution;
- (f) corporate asset class, which consists of any CR Exposure to any corporation, Partnership, sole proprietorship or Trustee in respect of a trust, other than Exposures categorised in sub-paragraphs (a) to (e), (g) and (h);
- (g) regulatory retail asset class, which consists of any CR Exposure meeting all of the following conditions:
  - (i) the Exposure is to an individual, a group of individuals, or a small business;
  - (ii) the Exposure takes the form of any of the following:
    - (A) revolving credit and lines of credit, including credit cards and overdrafts;
    - (B) personal term loans and leases, including instalment loans, vehicle loans and leases, student and educational loans;
    - (C) small business credit facilities and commitments; or
    - (D) any other product which the Regulator may specify from time to time;
  - (iii) the Exposure is one of a sufficient number of Exposures with similar characteristics such that the risks associated with such lending are reduced; and
  - (iv) the total Exposure to any obligor or group of obligors is not more than \$2 million;
- (h) residential mortgage asset class, which consists of any CR Exposure meeting all of the following conditions:
  - (i) the Exposure is to an individual or a group of individuals, or if the Exposure is to an entity other than an individual, the Authorised Person can demonstrate to the Regulator (if required to do so) that it has robust processes to ascertain that the Exposure is structured to replicate the risk profile of an Exposure to an individual or a group of individuals and that it is able to identify and manage the legal risks that arise in such structures;
  - (ii) the Exposure is secured against a first lien mortgage;

- (A) of a completed residential property; or
- (B) on an exceptional basis of an uncompleted residential property in a jurisdiction approved by the Regulator;
- (iii) the Exposure is not classified as an impaired asset in accordance with these Rules; and
- (iv) the Exposure is not to a corporation, Partnership, sole proprietorship or Trustee in respect of a trust where such corporation, Partnership, sole proprietorship or trust is engaged in residential building, development or management;
- (i) the commercial real estate asset class, which consists of any CR Exposure meeting all of the following conditions:
  - (i) the Exposure is to a corporation, Partnership, sole proprietorship or Trustee in respect of a trust; and
  - (ii) the Exposure is secured by commercial real estate; or
- (j) other Exposures asset class, which consists of any CR Exposure which does not fall within any of the categories in sub-paragraphs (a) to (i).

### **Guidance**

The Exposures listed under item (f) include transactions settled on a payment-versus-payment basis. For avoidance of doubt, the Regulator expects that a CR Exposure to a Securities firm should be categorised within the corporate asset class.

## **4.11 Credit Quality Grades and External Credit Assessments**

### **Guidance**

This Section governs credit assessments of Exposures for the purpose of determining the CRW for Credit Risk (CR) Exposures as provided in Rule 4.8.3 and for securitisation (SE) Exposures as provided in Rule 4.8.4.

- 4.11.1** Where possible, an Authorised Person must assign a CR Exposure to a Credit Quality Grade based on the external credit assessment that is applicable to the CR Exposure in accordance with tables mapping the ratings from an ECAI recognised by the Regulator to Credit Quality Grades, as published by the Regulator.
- 4.11.2** CR Exposures with external credit assessments from external credit rating agencies that are not recognised by the Regulator in the tables mapping the ratings to the Credit Quality Grades must be assigned to the Credit Quality Grade associated with "unrated" Exposures.
- 4.11.3** An Authorised Person must only use an external credit assessment which is accessible to the public. An Authorised Person may not use a credit assessment that is made available only to the parties to a transaction.
- 4.11.4** An Authorised Person must only use external credit assessments by a recognised ECAI for the purposes of mapping the ratings from that ECAI to Credit Quality

Grades. The Regulator may impose conditions on the use of such external credit assessments.

- 4.11.5** An Authorised Person must use its chosen recognised external credit rating agencies and their external credit assessments consistently for each type of Exposure, for both risk weighting and risk management purposes. Where an Authorised Person has two external credit assessments which map into different Credit Quality Grades, it must assign the CR Exposure to the Credit Quality Grade associated with the higher risk weight. Where an Authorised Person has three or more external credit assessments which map into two or more different Credit Quality Grades, it must assign the CR Exposure to the Credit Quality Grade associated with the higher of the two lowest risk weights.

### **Guidance**

For illustration, if there are three external credit assessments mapping to Credit Quality Grades with risk weights of 0%, 20% and 50%, then the applicable risk weight is 20%. If the external credit assessments map into Credit Quality Grades with risk weights of 20%, 50% and 50%, then the applicable risk weight is 50%.

- 4.11.6** An Authorised Person must not recognise the effects of CRM if such mitigation is already reflected in the issue-specific external credit assessment of the CR Exposure.
- 4.11.7** Where a CR Exposure has an issue-specific external credit assessment from a recognised ECAI, an Authorised Person must use such assessment. Where a CR Exposure does not have an issue-specific external credit assessment, an Authorised Person must:
- (a) if there is an issue-specific external credit assessment for another Exposure to the same obligor, use the issue-specific assessment for the other Exposure only if the Exposure without an issue-specific assessment ranks *pari passu* with or is senior to the Exposure with the issue-specific assessment;
  - (b) if the obligor has an Issuer external credit assessment, use the Issuer assessment of the obligor only if the Exposure without an issue-specific assessment ranks *pari passu* with or is senior to any unsecured claim that is not subordinated to any other claim on the obligor; or
  - (c) in all other cases, apply a risk weight equal to the higher of the risk weight that is applicable to an unrated Exposure and the risk weight associated with the external credit assessment, if any, of the obligor or another Exposure to the same obligor.
- 4.11.8** Where a CR Exposure is risk-weighted in accordance with Rules 4.11.7(a) or (b), an Authorised Person may use a domestic currency external credit assessment only if the CR Exposure is denominated in that domestic currency.
- 4.11.9** An Authorised Person may use an external credit assessment to risk weight a CR Exposure only if the external credit assessment has taken into account and reflects the entire amount of Credit Risk Exposure the Authorised Person has with regard to all payments owed to it.
- 4.11.10** An Authorised Person must not use unsolicited external credit assessments to assign any CR Exposure to a Credit Quality Grade, unless:

- (a) it has assessed the quality of the unsolicited external credit assessments that it intends to use and is satisfied that these are comparable in performance with solicited external credit assessments and maintains relevant records and documents to be made available to the Regulator upon request; and
- (b) it uses unsolicited external credit assessments consistently for each type of Exposures, for both risk weighting and risk management purposes.

## **4.12 Risk weights**

### **4.12.1** An Authorised Person with a CR Exposure must:

- (a) for a CR Exposure that is not past due for more than 90 days, determine the applicable risk weight in accordance with Rules 4.12.2 to 4.12.23;
- (b) for a CR Exposure that is past due for more than 90 days, determine the applicable risk weight in accordance with Rules 4.12.24 to 4.12.26; and
- (c) for a CR Exposure arising from an Unsettled Transaction, determine the Credit RWA in accordance with Rules A4.6.5 to A4.6.8.

### **Guidance**

Where a CR Exposure which is not past due has a Credit Quality Grade which corresponds to a risk weight of 150%, an Authorised Person may apply the appropriate treatment and risk weights set out in Rules 4.12.24 to 4.12.26.

### **Cash items**

- 4.12.2** Subject to Rule 4.12.3, an Authorised Person may apply a 0% risk weight to any CR Exposure categorised as a cash item.
- 4.12.3** An Authorised Person must apply a 20% risk weight to cheques, drafts and other items drawn on other banking institutions that are either payable immediately upon presentation or that are in the process of collection.

### **Central government and central bank asset class**

- 4.12.4** Subject to Rules 4.12.5, an Authorised Person must risk-weight any CR Exposure in the central government and central bank asset class in accordance with the table below.

Risk weights for the central government and central bank asset class

Credit Quality Grade	1	2	3	4	5	6	Unrated
Risk Weight	0%	20%	50%	100%	100%	150%	100%

- 4.12.5** An Authorised Person may apply a 0% risk weight to any CR Exposure to central governments or central banks of a GCC member country which are denominated and funded in the domestic currency of the GCC member country. For the purposes of this Rule, individual Emirates of the UAE will be considered as though they were GCC member countries.



### Guidance

Where the requirements of Rule 4.12.5 are not met the CR Exposure should be treated in accordance with Rule 4.12.4.

### Public sector enterprises (PSE) asset class

- 4.12.6** (1) Subject to Rule 4.12.8, an Authorised Person must risk-weight any CR Exposure in the PSE asset class in accordance with the following table:

Risk weights for the PSE asset class

Credit Quality Grade	1	2	3	4	5	6	Unrated
Risk Weight	20%	50%	100%	100%	100%	150%	100%

- (2) In (1), sovereign PSEs in the UAE and GCC that exhibit Credit Risks comparable to their central government must be treated in accordance with the requirements set out in Rule 4.12.5, where they meet the requirements in relation to the denomination and funding of the CR Exposure, otherwise they must be treated in accordance with Rule 4.12.6(1).
- (3) For the purposes of this Rule, a sovereign PSE is a PSE which has been designated as such by its national authorities.
- (4) Any foreign currency claims on sovereign PSEs which are determined to meet the conditions of (2) must be treated as one grade less favourable than the risk weight allocated in accordance with Rules 4.12.4 and 4.12.5.

### Guidance

Any PSE which exhibits risk characteristics of a commercial enterprise should be treated in accordance with Rules 4.12.13 to 4.12.15.

### Multilateral development bank (MDB) asset class

- 4.12.7** Subject to Rules 4.12.8 and 4.12.9, an Authorised Person must risk-weight any CR Exposure in the MDB asset class in accordance with the following table:

Risk Weights for the MDB asset class

Credit Quality Grade	1	2	3	4	5	6	Unrated
Risk Weight	0%	50%	50%	100%	100%	150%	50%

- 4.12.8** An Authorised Person must apply a 0% risk weight to any CR Exposure to the qualifying MDBs set out below:
- (a) The World Bank Group comprised of the International Bank for Reconstruction and Development (IBRD), the Multilateral Investment Guarantee Agency (MIGA), and the International Finance Corporation (IFC);
- (b) The Asian Development Bank (ADB);
- (c) The African Development Bank (AfDB);

- (d) The European Bank for Reconstruction and Development (EBRD);
- (e) The Inter-American Development Bank (IADB);
- (f) The European Investment Bank (EIB);
- (g) The European Investment Fund (EIF);
- (h) The Nordic Investment Bank (NIB);
- (i) The Caribbean Development Bank (CDB);
- (j) The Islamic Development Bank (IDB); and
- (k) The Council of Europe Development Bank (CEDB).

**4.12.9** An Authorised Person must apply a 0% risk weight to any CR Exposure to the Bank for International Settlements, the International Monetary Fund, the European Central Bank or the European Commission.

#### Bank asset class

**4.12.10** Subject to Rules 4.12.11 and 4.12.12, an Authorised Person must risk-weight any CR Exposure in the bank asset class in accordance with the following table:

CRWs for the bank asset class

Credit Quality Grade	1	2	3	4	5	6	Unrated
Risk Weight	20%	50%	50%	100%	100%	150%	50%
Risk Weight for short-term Exposures	20%	20%	20%	50%	50%	150%	20%

#### Guidance

For the purposes of the above table, short-term Exposures refer to Exposures with an Original Maturity of three months or less and that are not expected to be rolled over.

**4.12.11** An Authorised Person must risk-weight any short-term CR Exposure in the bank asset class with an issue-specific external credit assessment in accordance with the following table.

CRWs for short-term CR Exposures in the bank asset class with issue-specific external credit assessments

Short-term Credit Quality Grade	I	II	III	IV
Risk Weight	20%	50%	100%	150%

**4.12.12** The CRW for any CR Exposure in the bank asset class that does not have an external credit assessment by a recognised external credit rating agency must be the risk weight determined in accordance with the table in Rule 4.12.10 or the risk weight that is applicable to an CR Exposure to the central government of the



jurisdiction in which the banking institution is incorporated or established, whichever is higher. If a short-term CR Exposure in the bank asset class with an issue-specific external credit assessment:

- (a) attracts a risk weight of 50% or 100%, then the Authorised Person must apply a risk weight of not lower than 100% to any unrated short-term CR Exposure to the same banking institution; or
- (b) attracts a risk weight of 150%, then the Authorised Person must apply a risk weight of 150% to any unrated CR Exposure (whether long-term or short-term) to the same banking institution.

### **Corporate asset class**

**4.12.13** Subject to Rules 4.12.14 and 4.12.15, an Authorised Person must risk-weight any CR Exposure in the corporate asset class in accordance with the following table:

Risk Weights for the corporate asset class

Credit Quality Grade	1	2	3	4	5	6	Unrated
Risk Weight	20%	50%	100%	100%	150%	150%	100%

**4.12.14** An Authorised Person must risk-weight any short-term CR Exposure in the corporate asset class with an issue-specific external credit assessment in accordance with the following table:

Risk Weights for short-term CR Exposures in the corporate asset class with issue-specific external credit assessments.

Short-term Credit Quality Grade	I	II	III	IV
Risk Weight	20%	50%	100%	150%

**4.12.15** The risk weight for any CR Exposure in the corporate asset class that does not have an external credit assessment by a recognised external credit rating agency must be the risk weight determined in accordance with the table under Rule 4.12.13 or the risk weight that is applicable to an CR Exposure to the central government of the jurisdiction in which the corporate is incorporated or established, whichever is higher. If a short-term CR Exposure in the corporate asset class with an issue-specific external credit assessment:

- (a) attracts a risk weight of 50% or 100%, then the Authorised Person must apply a risk weight of not lower than 100% to any unrated short-term CR Exposure to the same corporate; or
- (b) attracts a risk weight of 150%, then the Authorised Person must apply a risk weight of 150% to any unrated CR Exposure (whether long-term or short-term) to the same corporate.

### Regulatory retail asset class

- 4.12.16** An Authorised Person must apply a 100% risk weight to any CR Exposure in the retail asset class.

### Residential mortgage asset class

- 4.12.17** An Authorised Person must risk weight any CR Exposure in the residential mortgage asset class in accordance with the following table:

Risk weights for the residential mortgage asset class

Condition	Risk Weight
Loans fully secured on residential property to a maximum loan to value of 80%	50%
Loans secured on residential property in excess of a loan to value of 80%	100%

### Commercial real estate asset class

- 4.12.18** An Authorised Person must apply a 100% risk weight to any CR Exposure in the commercial real estate asset class.

### Exposures associated with particularly high risks

- 4.12.19** An Authorised Person must apply a risk weight of 150% to Exposures, including Exposures in the form of Shares or Units in a Collective Investment Fund, that are associated with particularly high risks.
- 4.12.20** For the purposes of Rule 4.12.19, Exposures with particularly high risks must include the following Investments:
- (a) Investments in venture capital funds;
  - (b) Investments in hedge funds or alternative investment funds, including but not limited to Private Equity Funds;
  - (c) speculative immovable property financing; and
  - (d) any Investments declared by the Regulator to constitute high risk for the purpose of this Rule.
- 4.12.21** When assessing whether an Exposure other than Exposures referred to in Rule 4.12.20 is associated with particularly high risks, an Authorised Person must take into account the following risk characteristics:
- (a) there is a high risk of loss as a result of a default of the obligor; and
  - (b) it is impossible to assess adequately whether the Exposure falls under (a).

### Other Exposures asset class

- 4.12.22** An Authorised Person must apply a 100% risk weight to any CR Exposure in the other Exposures asset class.

- 4.12.23** Investments in equity or regulatory capital instruments issued by banks or Securities firms must be risk weighted at 100%, unless deducted from the capital base.

#### **Past due Exposures**

- 4.12.24** Subject to Rules 4.12.25 and 4.12.26, an Authorised Person must risk-weight the unsecured portion of any CR Exposure that is past due for more than 90 days in accordance with the following table.

#### **Risk weights for past due Exposures**

Condition	Risk Weight
Where specific provisions are less than 20% of the outstanding amount of the Exposure	150%
Where specific provisions are no less than 20% of the outstanding amount of the Exposure	100%

- 4.12.25** For the purposes of Rule 4.12.24, an Authorised Person must calculate the unsecured portion of any CR Exposure that is past due for more than 90 days as follows:

- (a) for an Authorised Person using the FCSA:  $\text{Unsecured Portion} = E - P - C_f$

where:

- (i)  $E = E$  calculated in accordance with Section 4.9;
- (ii)  $P$  = notional amount of eligible credit protection received; and
- (iii)  $C_f$  = fair value of eligible financial Collateral received; or

- (b) for an Authorised Person using the FCCA:

$$\text{Unsecured Portion} = E^* - P$$

where:

- (i)  $E^* = E^*$  calculated in accordance with Section 4.9; and
- (ii)  $P$  = notional amount of eligible credit protection received.

- 4.12.26** An Authorised Person must apply a 100% risk weight to any CR Exposure in the residential mortgage asset class that is past due for more than 90 days.

### **4.13 Credit Risk mitigation**

#### **Guidance**

This Section sets out the principles and methodologies for the recognition of CRM in the calculation of Credit RWA.

#### **General Requirements**

- 4.13.1** (1) An Authorised Person may not recognise the effects of CRM unless:

- (a) all documentation relating to that mitigation is binding on all relevant parties and legally enforceable in all relevant jurisdictions; and
  - (b) the Authorised Person complies with the Rules set out in this Section, as applicable.
- (2) Where the calculation of Credit RWA already takes into account the Credit Risk mitigant, the provisions of this Section do not apply.

### **Guidance**

An Authorised Person should conduct sufficient legal review to verify this and have a well-founded legal basis to reach this conclusion, and undertake such further review as necessary to ensure continuing enforceability. The review should cover relevant jurisdictions such as the jurisdiction whose law governs the credit protection or Collateral agreement and the jurisdiction whose law governs the transaction subject to the credit protection or Collateral agreement. There should be sufficient written documentary evidence to adequately support the conclusion drawn and rebut any legal challenge. While an Authorised Person may use either in-house or external legal counsel, it should consider whether or not in-house counsel opinion is appropriate. The senior management of the Authorised Person should ensure that an officer of the Authorised Person who is legally qualified and independent of the parties originating the transaction reviews the legal opinion and confirms that he is satisfied that an adequate review has been completed and that he agrees with the conclusions drawn. The Regulator may request a copy of any documentation to support the CRM used by the Authorised Person.

**4.13.2** Where an Authorised Person uses multiple CRM for a single Exposure, the Authorised Person must divide the Exposure into portions covered by each mitigation and must calculate the Credit Risk-weighted Exposure amount of each portion separately. An Authorised Person must apply the same approach when recognising eligible credit protection by a single protection provider where the eligible credit protection has differing maturities.

- 4.13.3**
- (1) An Authorised Person must take all appropriate steps to ensure the effectiveness of the CRM arrangements it employs and to address related risks.
  - (2) Where an Authorised Person reduces or transfers Credit Risk by the use of CRM, an Authorised Person must employ appropriate and effective policies and procedures to identify and control other risks which arise as a consequence of the transfer.

### **Guidance**

- 1. The use of techniques to reduce or transfer Credit Risk may simultaneously increase other risks (residual risks) which include legal, operational, liquidity and Market Risks. The Regulator expects an Authorised Person to employ methods to identify and control these risks, including:
  - a. strategy;
  - b. consideration of the underlying credit;
  - c. valuation;

- d. policies and procedures;
  - e. systems;
  - f. control of roll-off risks; and
  - g. management of any Large Exposures and other concentration risks, e.g. sectoral or geographic, arising from the use of CRM and the interaction of such risk with the overall Credit Risk profile of the Authorised Person.
2. In order to fulfil the above, an Authorised Person should ensure a clearly articulated strategy for the use of CRM as an intrinsic part of the general credit strategy of an Authorised Person.
3. Where an Exposure is subject to CRM, credit managers should continue to assess the Exposure on the basis of the obligor's creditworthiness. Credit managers should obtain and analyse sufficient financial information to determine the obligor's risk profile and its management and operational capabilities.
4. Collateral should be revalued frequently, and the unsecured Exposure should also be monitored frequently. Frequent revaluation is prudent, and the revaluation of marketable Securities should occur on at least a daily basis. Furthermore, measures of the potential unsecured Exposure under collateralised transactions should be calculated under stressed and normal conditions. One such measure would take account of the time and cost involved if the obligor or Counterparty were to default and the Collateral had to be liquidated. Furthermore, the setting of limits for collateralised Counterparties should take account of the potential unsecured Exposure. Stress tests and scenario analysis should be conducted to enable the Authorised Person to understand the behaviour of its portfolio of CRM arrangements under unusual market conditions. Any unusual or disproportionate risk identified should be managed and controlled.
5. Clear policies and procedures should be established in respect of Collateral management, including:
  - a. the terms of Collateral agreements;
  - b. the types of Collateral and enforcement of Collateral terms (e.g. waivers of posting deadlines);
  - c. the management of legal risks;
  - d. the administration of agreements (e.g. detailed plans for determining default and liquidating Collateral); and
  - e. the prompt resolution of disputes, such as valuation of Collateral or positions, acceptability of Collateral, fulfilment of legal obligations and the interpretation of contract terms.
6. The policies and procedures referred to under Guidance note 1.d. should be supported by Collateral management systems capable of tracking the location and status of posted Collateral (including re-hypothecated Collateral), outstanding Collateral calls and settlement problems.

7. Where an Authorised Person obtains credit protection that differs in maturity from the underlying credit Exposure, the Authorised Person should monitor and control its roll-off risks, i.e. the fact that the Authorised Person will be fully exposed when the protection expires, and the risk that it will be unable to purchase credit protection or ensure its capital adequacy when the credit protection expires.
8. Taking as Collateral large quantities of instruments issued by one obligor potentially creates Large Exposures and other concentration risks, e.g. sectoral or geographic. An Authorised Person should have a clearly defined policy with respect to the amount of those risks it is prepared to run. Such a policy might, for example, include a cap on the amount of Collateral it would be prepared to take from a particular Issuer or market. The Authorised Person should also take Collateral and purchased credit protection into account when assessing the potential concentrations in its overall credit profile.
9. Notwithstanding the presence of CRM considered for the purposes of calculating Credit RWA amounts, an Authorised Person should continue to undertake a full Credit Risk assessment of the underlying Exposure.

- 4.13.4** (1) An Authorised Person must be able to satisfy the Regulator that it has systems in place to manage potential concentration of risk arising from its use of guarantees and Credit Derivatives.
- (2) An Authorised Person must be able to demonstrate how its strategy in respect of its use of CRM techniques, and in particular use of Credit Derivatives and guarantees interacts with its management of its overall risk profile.

## **Collateral**

### **Guidance**

In order to recognise the effects of CRM of the types of Collateral set out in Rules 4.13.5 to 4.13.7, an Authorised Person must ensure that the relevant requirements in Rule 4.13.8 are complied with.

- 4.13.5** (1) For an Authorised Person using the FCSA, eligible financial Collateral comprises:
- (a) cash (as well as certificates of Deposit or other similar instruments issued by the Authorised Person) on Deposit with the Authorised Person;
  - (b) gold;
  - (c) any debt security:
    - (i) with an Original Maturity of one year or less that has a short-term Credit Quality Grade of 3 or better as set out in Section 4.12; or
    - (ii) with an Original Maturity of more than one year that has a Credit Quality Grade of 4 or better as set out in Section 4.12 if it is issued by a central government or central bank, or a

Credit Quality Grade of 3 or better as set out in Section 4.12 if it is issued by any other entity;

- (d) any debt security issued by a bank that does not have an external credit assessment by a recognised ECAI if it fulfils the following criteria:
  - (i) any debt security which is listed on a regulated exchange;
  - (ii) the debt security is classified as senior debt, not subordinated to any other debt obligations of its Issuer;
  - (iii) all other rated debt Securities issued by the same Issuer which rank equally with the mentioned debt security have a long term or short term (as applicable) Credit Quality Grade by a recognised ECAI of "3" or better;
  - (iv) the Authorised Person is not aware of information to suggest that the issue would justify a Credit Quality Grade of below "3" as indicated in (iii) above; and
  - (v) the Authorised Person can demonstrate to the Regulator that the market liquidity of the debt security is sufficient to enable the Authorised Person to dispose the debt security at market price;
- (e) any equity security (including convertible bonds) that is included in a main index; or
- (f) any Unit in a Collective Investment Fund where:
  - (i) a price for the units is publicly quoted daily; and
  - (ii) at least 90% of the deposited property of the Fund is invested in instruments listed in this Rule.
- (2) Cash-funded CLNs issued by an Authorised Person against Exposures in the Non-Trading Book which fulfil the criteria for eligible Credit Derivatives must be treated as cash collateralised transactions.
- (3) Cash, mentioned in (1)(a), includes cash on Deposit, certificates of Deposit or other similar instruments issued by the Authorised Person that are held as Collateral at a third-party bank in a non-custodial arrangement and that are pledged or assigned to the Authorised Person. This is subject to the pledge or assignment being unconditional and irrevocable. Under the FCSA, the risk weight to be applied to the Exposure covered by such Collateral must be the risk weight of the third-party bank.

## Guidance

1. For the purposes of Rule 4.13.5 and 4.13.6, eligible financial Collateral excludes any T1 Capital instrument or T2 Capital instrument issued by any entity in the Financial Group of the Authorised Person, which is held by the Authorised Person or any of its Financial Group entities as Collateral.



2. For an Authorised Person using Units of a Fund under the FCSA approach, the use or potential use by that Fund of Derivative instruments solely to hedge Investments listed in Rule 4.13.5 should not preclude the Units in that Fund from being recognised as eligible financial Collateral.

**4.13.6** For an Authorised Person using the FCCA, eligible financial Collateral comprises:

- (a) any instrument listed in Rule 4.13.5;
- (b) any equity Security (including a convertible bond) that is traded on a regulated exchange; and
- (c) any Unit in a Collective Investment Fund which invests in equity Securities referred to in (b), where:
  - (i) a price for the Units is publicly quoted daily; and
  - (ii) at least 90% of the deposited property of the Fund is invested in instruments listed in this Rule and Rule 4.13.5.

**4.13.7** In the case of any Counterparty Risk Exposures in Rules 4.13.5 and 4.13.6 arising from an SFT which are included in the Trading Book, eligible financial Collateral includes all instruments which an Authorised Person may include in its Trading Book.

### **Guidance**

For an Authorised Person using Units of a Fund under the FCSA approach, the use or potential use by that Fund of Derivative instruments solely to hedge Investments listed in Rule 4.13.5 should not preclude the Units in that Fund from being recognised as eligible financial Collateral.

### **Requirements for Recognition of Collateral**

**4.13.8** An Authorised Person must ensure that the following requirements are complied with before it recognises the effects of CRM of any Collateral:

- (a) the legal mechanism by which Collateral is pledged, assigned or transferred must confer on the Authorised Person the right to liquidate or take legal possession of the Collateral, in a timely manner, in the event of the default, insolvency or bankruptcy (or one or more otherwise-defined credit events set out in the transaction documentation) of the Counterparty (and, where applicable, of the custodian holding the Collateral);
- (b) the Authorised Person has taken all steps necessary to fulfil those requirements under the law applicable to the Authorised Person's interest in the Collateral for obtaining and maintaining an enforceable security interest by registering it with a registrar or for exercising a right to net or set off in relation to title transfer Collateral;
- (c) the credit quality of the Counterparty and the value of the Collateral do not have a material positive correlation;
- (d) Securities issued by the Counterparty or any Closely Related Counterparty are not eligible;



- (e) the Authorised Person has implemented procedures for the timely liquidation of Collateral to ensure that any legal conditions required for declaring default of Counterparty and liquidating the Collateral are observed, and that the Collateral can be liquidated promptly; and
- (f) where the Collateral is held by a custodian, the Authorised Person has taken reasonable steps to ensure that the custodian segregates the Collateral from its own assets.

### **Guarantees**

- 4.13.9** (1) An Authorised Person may recognise the effects of CRM of a guarantee only if it is provided by any of the following entities:
- (a) central government or central bank;
  - (b) MDB referred to in Rule 4.12.8;
  - (c) International Organisations referred to in Rule 4.12.9;
  - (d) PSE;
  - (e) banks and Securities firms which qualify for inclusion in bank asset class; or
  - (f) any other entity that has an external credit assessment from a recognised credit rating agency that maps to a Credit Quality Grade 3 or better.
- (2) An Authorised Person must not recognise the effects of CRM of a guarantee unless all of the following requirements are complied with:
- (a) the guarantee is an explicitly documented obligation assumed by the guarantor;
  - (b) the guarantee represents a direct claim on the guarantor;
  - (c) the extent of the credit protection cover is clearly defined and incontrovertible;
  - (d) other than in the event of non-payment by the Authorised Person of Money due in respect of the guarantee if applicable, there is an irrevocable obligation on the part of the guarantor to pay out a pre-determined amount upon the occurrence of a credit event, as defined under the guarantee;
  - (e) the guarantee does not contain any clause, the fulfilment of which is outside the direct control of the Authorised Person, that:
    - (i) would allow the guarantor to cancel the guarantee unilaterally;
    - (ii) would increase the effective cost of the guarantee as a result of deteriorating credit quality of the underlying Exposure;

- (iii) could prevent the guarantor from being obliged to pay out in a timely manner in the event that the underlying obligor fails to make any payment due; or
- (iv) could allow the maturity of the guarantee agreed ex-ante to be reduced ex-post by the guarantor;
- (f) the Authorised Person is able in a timely manner to pursue the guarantor for any monies outstanding under the documentation governing the transaction on the default of, or non-payment by, the underlying obligor without first having to take legal action to pursue the underlying obligor for payment; and
- (g) the guarantee covers all types of payments that the underlying obligor is expected to make under the documentation governing the transaction, except in the case of accrued interest, accrued expenses or fees outstanding, where these are deemed immaterial.

### **Guidance**

1. Rule 4.13.9(2)(e) does not include any guarantee with a cancellation clause where it is provided that any obligation incurred or transaction entered into prior to any cancellation, unilateral or otherwise, continues to be guaranteed by the guarantor.
2. The guarantee payments may be in the form of the guarantor making a lump sum payment of all monies to the Authorised Person or the guarantor assuming the future payment obligations of the Counterparty covered by the guarantee, as specified in the relevant documentation governing the guarantee.

**4.13.10** In addition to the requirements in Rule 4.13.9, where an Authorised Person has an Exposure that is protected by a guarantee or that is counter-guaranteed by a central government or central bank, a regional government or local authority or a PSE claims on which are treated as claims on the central government in whose jurisdiction they are established, a MDB or an international organisation to which a 0% risk weight is assigned under Section 4.12, an Authorised Person may treat the Exposure as being protected by a direct guarantee from the central government or central bank in question, provided the following requirements are complied with:

- (a) the counter-guarantee covers all Credit Risk elements of the Exposure;
- (b) both the original guarantee and the counter-guarantee comply with all the requirements for guarantees set out in this Section, except that the counter-guarantee need not be direct and explicit with respect to the original Exposure; and
- (c) the Authorised Person is able to satisfy the Regulator that the cover is robust and that nothing in the historical evidence suggests that the coverage of the counter-guarantee is less than effectively equivalent to that of a direct guarantee by the entity in question.

### **Credit Derivatives**

**4.13.11** (1) An Authorised Person may recognise the effects of CRM of a Credit Derivative only if it is provided by any of the following entities:

- (a) central government or central bank;
  - (b) MDB referred to in Rules 4.12.7 to 4.12.9;
  - (c) International Organisations referred to in Rule 4.12.9;
  - (d) PSE;
  - (e) banks and Securities firms which qualify for inclusion in bank asset class; or
  - (f) any other entity that has an external credit assessment from a recognised credit rating agency that maps to a Credit Quality Grade 3 or better.
- (2) An Authorised Person may recognise the effects of CRM of only the following types of Credit Derivatives:
- (a) credit default swaps;
  - (b) Total Return Swaps;
  - (c) CLNs which are cash funded; and
  - (d) instruments that are composed of, or are similar in economic substance, to one or more of the Credit Derivatives in (a) to (c).

**4.13.12** An Authorised Person must not recognise the effects of CRM of any Credit Derivative unless all of the following requirements are complied with:

- (a) the terms and conditions of any credit protection obtained via a Credit Derivative must be set out in writing by both the Authorised Person and the provider of credit protection;
- (b) the Credit Derivative must represent a direct claim on the provider of credit protection;
- (c) the extent of the credit protection cover is clearly defined and incontrovertible;
- (d) other than in the event of non-payment by the Authorised Person of Money due in respect of the Credit Derivative, there is an irrevocable obligation on the part of the provider of the credit protection to pay out a pre-determined amount upon the occurrence of a credit event, as defined under the Credit Derivative contract;
- (e) the Credit Derivative contract must not contain any clause, the fulfilment of which is outside the direct control of the Authorised Person, that:
  - (i) would allow the provider of credit protection to cancel the credit protection cover unilaterally;
  - (ii) would increase the effective cost of the credit protection cover as a result of deteriorating credit quality of the underlying Exposure;

- (iii) could prevent the provider of credit protection from being obliged to pay out in a timely manner in the event that the underlying obligor fails to make any payment due; or
  - (iv) could allow the maturity of the credit protection agreed ex-ante to be reduced ex-post by the provider of credit protection;
- (f) the credit events specified by the contracting parties must at a minimum cover:
  - (i) failure to pay the amounts due under terms of the underlying Exposure that are in effect at the time of such failure (with a grace period, if any, that is closely in line with the grace period in the underlying Exposure);
  - (ii) bankruptcy, insolvency or inability of the underlying obligor to pay its debts, or its failure or admission in writing of its inability generally to pay its debts as they become due, and analogous events; and
  - (iii) restructuring of the underlying Exposure involving forgiveness or postponement of principal, interest or fees that results in a credit loss event (i.e. charge-off, specific provision or other similar debit to the profit and loss account);
- (g) the Credit Derivative must not terminate prior to the maturity of the underlying Exposure or expiration of any grace period required for a default on the underlying Exposure to occur as a result of a failure to pay;
- (h) a robust valuation process to estimate loss reliably must be in place in order to estimate loss reliably for any Credit Derivative that allows for cash settlement. There must be a clearly specified period for obtaining post-credit event valuations of the underlying obligation;
- (i) where the right or ability of the Authorised Person to transfer the underlying Exposure to the credit protection provider is required for settlement, the terms of the underlying Exposure must provide that any required consent to such transfer may not be unreasonably withheld;
- (j) the identity of the parties responsible for determining whether a credit event has occurred must be clearly defined. This determination must not be the sole responsibility of the credit protection provider. The Authorised Person must have the right or ability to inform the credit protection provider of the occurrence of a credit event; and
- (k) the underlying obligation and the reference obligation specified in the Credit Derivative contract for the purpose of determining the cash settlement value or the deliverable obligation or for the purpose of determining whether a credit event has occurred may be different only if:
  - (l)
    - (i) the reference obligation ranks pari passu with or is junior to the underlying obligation; and
    - (ii) the underlying obligation and reference obligation share the same obligor (i.e. the same legal entity) and legally enforceable cross-default or cross-acceleration clauses are in place.

## Guidance

1. An Authorised Person should not recognise the effects of CRM of a Total Return Swap if it purchases credit protection through a Total Return Swap and records the net payments received on the swap as net income, but does not record offsetting deterioration in the value of the underlying asset that is protected (either through reductions in its marked-to-market value or by an addition to reserves).
2. The Regulator would generally consider the requirements in (f) to have been complied with even if the requirements are not specifically set out so long as the obligations of the credit protection provider under the Credit Derivative contract would include those requirements.
3. The Regulator would generally consider the cash settlement methodology provided in the ISDA Credit Derivatives Definitions as satisfying the requirement for obtaining post-credit event valuations of the underlying obligation.

## Currency mismatches

- 4.13.13** (1) In the case where there is a currency mismatch between the credit protection and the underlying Exposure, an Authorised Person must reduce the amount of the Exposure deemed to be protected by applying a haircut, as follows:

$$\text{Protected portion GA} = G (1 - H_{FX})$$

where:

- (a)  $G$  = notional amount of the credit protection; and
  - (b)  $H_{FX}$  = haircut appropriate for currency mismatch between the credit protection and underlying obligation Exposure based on a ten-business day holding period, assuming daily mark-to-market.
- (2) An Authorised Person must determine  $H_{FX}$  in the following manner:
- (a) if the Authorised Person uses standard supervisory haircuts,  $H_{FX}$  is 8%; and
  - (b) if the Authorised Person uses own-estimate haircuts, it must estimate  $H_{FX}$  according to Rules A4.3.6 to A4.3.26 in App4 based on a ten-business day holding period, assuming daily mark-to-market.
- (3) If the credit protection is not marked-to-market daily,  $H_{FX}$  must be scaled in accordance with Rule A4.3.25.

## Maturity Mismatches

- 4.13.14** An Authorised Person may recognise the effects of CRM for an Exposure where there is a Maturity Mismatch only if the Credit Risk mitigant has an Original Maturity of at least one year and a residual maturity of more than three months. For the purposes of calculating Credit RWA, a Maturity Mismatch occurs when the residual maturity of the Credit Risk mitigant is less than that of the underlying Exposure.

- 4.13.15** (1) An Authorised Person must determine the maturity of the underlying Exposure and the maturity of the Credit Risk mitigant conservatively. The residual maturity of the underlying Exposure must be gauged as the longest possible remaining time before the Counterparty is scheduled to fulfil its obligation, taking into account any applicable grace period.
- (2) In the case of Credit Risk the mitigant, embedded Options which may reduce the term of the credit protection must be taken into account so that the shortest possible residual maturity is used. Where a call is at the discretion of the protection seller, the residual maturity will be at the first call date. If the call is at the discretion of the Authorised Person but the terms of the arrangement at origination of the Credit Derivative contain a positive incentive for the Authorised Person to call the transaction before contractual maturity, the remaining time to the first call date will be deemed to be the residual maturity.
- 4.13.16** (1) An Authorised Person must calculate the value of the CRM adjusted for any Maturity Mismatch (referred to as "PA"), using the following formula:

$$PA = P(t-0.25)/(T-0.25)$$

where -

- (a) P = value of the credit protection (e.g. Collateral amount, guarantee amount) adjusted for any haircuts;
  - (b) t = min (T, residual maturity of the Credit Risk mitigant) expressed in years; and
  - (c) T = min (5, residual maturity of the Exposure) expressed in years.
- (2) For residual maturity of the Exposure in the case of a basket of Exposures with different maturities, an Authorised Person must use the longest maturity of any of the Exposures as the maturity of all the Exposures being hedged.

### Guidance

The positive incentive for an Authorised Person to call the transaction before contractual maturity as referred in Rule 4.13.15 would be, for example, a situation wherein there is a step-up in cost in conjunction with a call feature or where the effective cost of cover remains the same even if credit quality remains the same or increases.

### On-balance sheet Netting

- 4.13.17** (1) An Authorised Person may recognise as eligible the Netting of an on-balance sheet Exposure against an offsetting on-balance sheet item if the related Netting agreement meets the condition in Rule 4.13.19.
- (2) Eligibility for Netting is limited to reciprocal cash balances between the Authorised Person and its Counterparty. Only loans and Deposits of the Authorised Person may be subject to a modification of their Credit RWAs as a result of an on-balance sheet Netting agreement.

- 4.13.18** (1) Assets (loans) and liabilities (Deposits) subject to recognised on-balance sheet Netting are to be treated as cash Collateral using the formula in A4.3.6, under which an Authorised Person may use zero haircuts for Exposure and Collateral.
- (2) When a currency mismatch exists, an Authorised Person must apply the standard supervisory haircut of 8% for currency mismatch.
- (3) When a Maturity Mismatch exists between the off-setting items, an Authorised Person must apply the Rules 4.13.14 to 4.13.16 to address the Maturity Mismatch.
- (4) Net credit Exposure, after taking into account recognised Netting, will be subject to the applicable CRW for the Counterparty.

**4.13.19** For an Authorised Person to recognise an on-balance sheet Netting agreement for the purposes of Rule 4.13.17, all of the following conditions must be satisfied:

- (1) (a) both the on-balance sheet Exposure (asset) and the offsetting on-balance sheet item (liability) are owing between the Authorised Person and the same Counterparty;
- (b) the Authorised Person nets the on-balance sheet Exposure (asset) and the offsetting on-balance sheet item (liability) in a way that is consistent with its legal rights against the Counterparty;
- (c) a legal right of set-off exists;
- (d) the agreement between the Authorised Person and the Counterparty does not contain a Walkaway Clause;
- (e) the Netting provided for in the agreement between the Authorised Person and the Counterparty is effective and enforceable in the event of default, bankruptcy, liquidation or other similar circumstances affecting either the Counterparty or the Authorised Person;
- (f) the on-balance sheet Exposure (asset) and the offsetting on-balance sheet item (liability) are monitored, controlled and managed on a net basis; and
- (g) the potential for roll-off Exposure is monitored and controlled where there is a Maturity Mismatch; and
- (2) it has, in respect of each relevant jurisdiction, a written and reasoned legal opinion which:
- (a) has been provided by an external source of legal advice of appropriate professional standing;
- (b) confirms that the requirements of (1)(a)-(e) are met for all relevant jurisdictions; and
- (c) is kept under review to ensure that it remains correct and up to date in the event of changes to the relevant laws.



## **Guidance**

1. An Authorised Person 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 Person should assume that the requirements for Netting have not been met.
2. An Authorised Person using a standard form Netting agreement and a supporting legal opinion should ensure that the relevant requirements in Rules 4.13.17 to 4.13.19 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 Person should satisfy itself that the amended Netting agreement continues to meet the legal and contractual requirements in Rules 4.13.17 to 4.13.19. For instance, in such cases, an Authorised Person may wish to obtain a second legal opinion to confirm that the relevant requirements in Rules 4.13.17 to 4.13.19 are still satisfied.
3. App4 sets out the calculation of the PFCE arising from OTC Derivative contracts, on a net basis.

## **4.14 Securitisation**

### **Application**

**4.14.1** This Section applies to an Authorised Person 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 A4.10.1;
- (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.

### **Interpretation**

**4.14.2** For the purposes of this Chapter and App4, "securitisation" includes Traditional Securitisation, Synthetic Securitisation and Re-securitisation, as defined below:

- (a) A Traditional Securitisation is a structure where the cash flow from an underlying pool of Exposures is used to service at least two different stratified risk positions or tranches reflecting different degrees of Credit Risk. Payments to the investors depend upon the performance of the specified underlying Exposures, as opposed to being derived from an obligation of the entity originating those Exposures. A Traditional Securitisation will generally assume the movement of assets off balance sheet.
- (b) A Synthetic Securitisation is a structure with at least two different stratified risk positions or tranches that reflect different degrees of Credit Risk where Credit Risk of an underlying pool of Exposures is transferred, in whole or in



part, through the use of funded (e.g. CLNs) or unfunded (e.g. credit default swaps) Credit Derivatives or guarantees that serve to hedge the Credit Risk of the portfolio. Accordingly, the investors' potential risk is dependent upon the performance of the underlying pool. A Synthetic Securitisation may or may not involve the removal of assets off balance sheet.

- (c) A Re-securitisation Exposure is a securitisation Exposure in which the associated underlying pool of Exposures is tranching and at least one of the underlying Exposures is a securitisation Exposure. In addition, an Exposure to one or more Re-securitisation Exposures is a Re-securitisation Exposure.

### **Guidance**

The Regulator would treat other techniques to achieve the financing or re-financing of assets 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 as "securitisation".

### **Systems and controls for the use of securitisations**

**4.14.3** An Authorised Person must implement and maintain appropriate risk management systems to identify, manage, monitor and, where applicable, control all risks in relation to a securitisation transaction whether the firm is an investor, Originator or Sponsor. In particular, such risk management systems should effectively address the following risks:

- (a) the liquidity and capital implications that may arise from the items returning to the balance sheet;
- (b) the Operational Risks that may arise under a securitisation; and
- (c) reputational risks that may arise as a result of its securitisation activities.

**4.14.4** An Authorised Person must have appropriate policies and procedures to ensure that the economic substance of the transaction is fully reflected in the process of managing the risks arising from such transactions. An Authorised Person must have appropriate policies and procedures in place to document its systems and controls in relation to securitisation risks. These policies should include details on the capital effects of the securitisation as set out in this Chapter.

**4.14.5** An Authorised Person must conduct periodic stress tests in relation to its securitisation activities and off balance sheet Exposures, including testing of future ability to transact securitisation as a means of CRM or for liquidity purposes.

### **Guidance**

1. The periodic stress testing in relation to securitisation activities referred to in Rule 4.14.5 should consider the firm-wide impact of those activities and Exposures in stressed market conditions and the implications for other sources of risk. Such stress tests should include both existing securitisation Exposures and transactions in the pipeline, as there is a risk of the pipeline transactions not being completed in a stressed market scenario.
2. The frequency and extent of stress testing to fulfil the requirements of Rule 4.14.5 should be determined on the basis of the materiality of the

Authorised Person's securitisation volumes and its off-balance sheet Exposures.

3. An Authorised Person should have procedures in place to assess and respond to the results produced from the stress testing and these should be taken into account under the ICAAP.

**4.14.6** In order to qualify for using the Rules specified in this Section, and particularly the risk weighting approach outlined below, an Authorised Person must demonstrate the following:

- (a) a comprehensive understanding of the risk characteristics of its individual securitisation Exposures, whether on balance sheet or off balance sheet, as well as the risk characteristics of the pools underlying securitisation Exposures;
- (b) ability to access the performance information on the underlying pools on an on-going basis in a timely manner; and
- (c) a thorough understanding of all structural features of a securitisation transaction that would materially impact the performance of the Authorised Person's Exposure to the transaction, such as waterfall triggers, Credit Enhancements, liquidity enhancements, market value triggers and deal specific definitions of default.

#### **Guidance**

1. An Authorised Person which is an investor, Originator or Sponsor of a Securitisation should fully understand the risks it has assumed in order to ensure that it can accurately determine the Capital Requirements for the Exposures arising from the securitisation in accordance with the Rules in this Section.
2. For the purposes of Rule 4.14.6(b) information should include the percentage of loans 30, 60, 90 days past due, default rates, prepayment rates, loans in foreclosure, property type, occupancy, average credit score etc. For Re-securitisations, Authorised Persons should have information relating to not only the underlying securitisation transactions but also the characteristics and performance of the underlying pools of such transactions.

**4.14.7** Where an Authorised Person is either an Originator or a Sponsor of a Traditional Securitisation or a Synthetic Securitisation:

- (a) the Authorised Person intending to conduct the securitisation must notify the Regulator at least 30 days in advance of the proposed execution of the securitisation;
- (b) the Authorised Person conducting the securitisation must calculate its Credit RWAs for all resultant Exposures from that securitisation, in accordance with Section 4.8, provided the requirements of this Section are met; and
- (c) the Authorised Person conducting the securitisation must produce documentation reflecting the execution and economic substance of the transaction.

**Guidance**

The notification made to the Regulator under (a) should include, inter alia, amounts of assets subject to securitisation, amounts retained, details of securitisation including legal structure, rating, tranches, details of legal transfer and any CRM applied and implications on the capital and liquidity position on the Authorised Person.

**Calculation of Credit RWA arising from securitisations**

- 4.14.8** An Authorised Person must calculate the Credit RWA amounts for Exposures arising from securitisations according to the requirements in this Section.

**Guidance**

1. An Authorised Person should apply the securitisation framework set out in this Section for determining the Capital Requirements on Exposures arising from traditional and Synthetic Securitisations or similar structures that contain features common to both.
2. This Section sets out the requirements for Originators, Authorised Persons which transfer Credit Risk from their balance sheets and Sponsors in a securitisation transaction involving Non-Trading Book Exposures. This Section also sets out the methodologies for calculation of RWA amounts for securitisation Exposures. The Rules setting out the methodologies for calculation of Market Risk Capital Requirement amounts for securitisation Exposures held in the Trading Book are specified in Chapter 5 and App6 of these Rules.
3. As securitisations may be structured in many different ways, an Authorised Person engaging in the activities relating to securitisations (whether traditional or a Synthetic Securitisation) must ensure that the economic substance of the transaction is fully considered, and reflected, in determining the capital treatment of a securitisation, rather than relying on the legal form of the Securitisation.

- 4.14.9** An Authorised Person is required, subject to Rule 4.14.12, to include all securitisation Exposures in its calculation of Credit RWAs relating to securitisations, including the following:

- (a) those arising from the provision of Credit Risk mitigants to a securitisation;
- (b) investments in asset backed Securities;
- (c) retention of a subordinated tranche;
- (d) extension of a liquidity facility; and
- (e) extension of Credit Enhancement.

- 4.14.10** An Authorised Person must include in its calculation of Credit RWA all of its securitisation Exposures held in the Non-Trading Book, except for those securitisation Exposures which the Authorised Person is required to include as deductions from T1 Capital and deductions from T2 Capital.

**4.14.11** Repurchased securitisation transactions must be treated as retained securitisation Exposures.

### **Deductions**

- 4.14.12** (1) An Authorised Person may deduct SE Exposures which it has chosen not to treat in accordance with Rules 4.14.8 to 4.14.11 from Capital Resources - 100% from CET1.
- (2) Credit-Enhancing Interest-Only Strips (net of the deductions from CET1 Capital required at Rule 4.14.13) are deducted 100% from CET1 Capital.
- (3) Deductions from capital may be calculated net of specific provisions taken against relevant securitisation Exposures.
- 4.14.13** An Authorised Person must include as deductions from CET1 Capital any increase in issued capital or reserves resulting from a securitisation, such as that associated with expected future margin income resulting in a gain-on-sale that is recognised as issued capital or reserves.

### **Guidance**

Gain-on-sale arises when there has been an increase in equity of the Authorised Person associated with recognising the discounted value of the expected future margin income as part of regulatory capital.

**4.14.14** An Authorised Person must assign a securitisation Exposure to a Credit Quality Grade based on the external credit assessment (where available) that is applicable to the securitisation Exposure in accordance with relevant Rules in this Chapter.

### **Implicit Support**

- 4.14.15** An Originator or a Sponsor of a securitisation must not provide Implicit Support to a securitisation transaction with a view to reducing potential or actual losses to investors outside of its contractual obligations;
- 4.14.16** If an Originator fails to comply with Rule 4.14.15 in respect of a securitisation, it:
- (a) must include all the underlying Exposures of the securitisation in its calculation of Credit RWAs as if those Exposures had not been securitised and were on the balance sheet of the Authorised Person;
  - (b) must not recognise any gain-on-sale of assets to the securitisation; and
  - (c) must disclose to investors that the Authorised Person has provided non-contractual support and the regulatory capital impact of doing so.

### **Requirements in order for a Traditional Securitisation to be excluded from the calculation of RWA**

- 4.14.17** (1) An Authorised Person which is an Originator or a Sponsor of a Traditional Securitisation may exclude securitised Exposures from the calculation of Credit RWA amounts only if all of the conditions detailed in Rule A4.10.1 have been complied with.

- (2) An Authorised Person meeting the requirements specified in Rule A4.10.1 must hold regulatory capital against any securitisation Exposures it retains.

#### **Requirements in order for a Synthetic Securitisation to be excluded from the calculation of RWA**

- 4.14.18** (1) An Authorised Person which is an Originator or a Sponsor of a Synthetic Securitisation may recognise the effects of CRM of the Synthetic Securitisation in calculating its SE Exposure RWAs, only if:
- (a) all of the conditions detailed in Rule A4.10.2 have been complied with;
  - (b) the effects of CRM are obtained through eligible credit protection, eligible financial Collateral or both; and
  - (c) Credit Risk is transferred to third parties.
- (2) In relation to (b), the CRM techniques used must meet the requirements of Section 4.13.

#### **Guidance**

In relation to (1)(c) the transferor is deemed to have effective control over the transferred Credit Risk Exposures if it has the ability to repurchase the assets, or is obliged to retain the risk of the transferred assets. This does not include the retention of servicing rights.

- 4.14.19** (1) An Authorised Person meeting the conditions in Rule 4.14.18 must still hold regulatory capital against any securitisation Exposures it retains.
- (2) The Authorised Person may recognise the effects of CRM of eligible financial Collateral pledged by any SPE, but it may not recognise any SPE which is an Issuer of securitisation Exposures as an eligible protection provider.

#### **Operational requirements for use of external credit assessments**

- 4.14.20** The external credit assessment used for determining the applicable risk weight for a CR Exposure must be determined by taking into account the entire amount of Credit Risk (principal and interest) an Authorised Person is exposed to.
- 4.14.21** Credit assessments can only be considered from an ECAI, and must meet the following criteria:
- (a) any credit assessments used for the purposes of risk weighting must be publicly available;
  - (b) the external credit rating agencies must have expertise and market acceptance in rating securitisations of the nature being used for risk weighting purposes;
  - (c) Authorised Persons must apply external credit rating agency ratings consistently to all tranches of securitisations;

- (d) where an Exposure has two ratings from external credit rating agencies the less favourable rating must be used; and
- (e) where an Exposure has more than two assessments by external credit rating agencies the two most favourable ratings can be selected, the review of these assessments is then determined in line with (d).

**4.14.22** Where any CRM has been considered as part of any rating applied to a tranche of a securitisation, the risk weighting should be used and no additional capital recognition is permitted.

**4.14.23** An Authorised Person must treat any securitisation Exposure as an unrated Exposure where:

- (a) the external credit assessment incorporates the credit protection provided directly to the SPE by a protection provider which is not an eligible protection provider;
- (b) the external credit assessment is at least partly based on unfunded support provided by the Authorised Person itself (e.g. if an Authorised Person buys ABCP) where it provides an unfunded securitisation Exposure extended to the ABCP Programme, such as a liquidity facility or Credit Enhancement, and that Exposure plays a role in determining the credit assessment on the ABCP, the Authorised Person must treat the ABCP as if it were not rated and continue to hold capital against the other securitisation Exposures it provides);
- (c) the Credit Risk mitigant is not obtained by the SPE but is separately obtained and applied to a specific securitisation Exposure (e.g. a particular tranche); or
- (d) the CRM does not meet the eligibility criteria for mitigation specified in Section 4.13.

**4.14.24** Where CRM is applied to a specific Exposure within a securitisation the Authorised Person must treat the Exposure as unrated, and then use the mitigation as set out in Section 4.13 should the Rules contained in that Section apply.

**4.14.25** An Authorised Person must not use an external credit rating agency rating for risk weighting purposes where the assessment is at least partly based on unfunded support provided by the Authorised Person itself.

**4.14.26** The treatment outlined in Rule 4.14.24 also applies to Exposures in the Authorised Person's Trading Book. An Authorised Person's Capital Requirement for such Exposures held in the Trading Book can be no less than the amount required under the Non-Trading Book.

#### **Calculation of RWA amounts for securitisation Exposures**

- 4.14.27** (1) In order to calculate the RWA amount for a securitisation position, the relevant risk weight must be assigned to the Exposure value of the position in accordance with this Section, based on the credit quality of the position.
- (2) For the purposes of this Rule, the credit quality of a position must be determined by reference to the applicable credit quality assessment from a recognised external credit rating agency.

- 4.14.28** In cases where there are Exposures to different tranches in a securitisation, the Exposure to each tranche must be considered a separate securitisation position.
- 4.14.29** Exposure value of an off-balance sheet securitisation position must, subject to A4.2.2, be its nominal value multiplied by a CCF of 100%, wherever applicable.
- 4.14.30** The Exposure value of a securitisation position arising from a financial Derivative must be determined in accordance with Rules 4.6.14 to 4.6.21 dealing with treatment of financial Derivatives.

### Assigning risk weights

- 4.14.31** An Authorised Person must assign a risk weight for any SE Exposure in accordance with the tables below, to calculate the Credit RWA amounts for that Exposure.

#### Risk Weights for Long-Term securitisation Exposures

Long Term rating category					
Credit Quality Grade	1	2	3	4	5 and above including unrated
Risk Weight to be applied to securitisation Exposures (excluding Re-securitisation Exposures)	20%	50%	100%	350%	1000% or deduction from Capital Resources
Risk weight applied to Re-securitisation Exposures	40%	100%	225%	650%	1000% or deduction from Capital Resources

#### Risk Weights for Short-Term securitisation Exposures

Short-term rating category				
Credit Quality Grade	I	II	III	IV and above including unrated
Risk Weight to be applied	20%	50%	100%	1000%
Risk Weight applied to Re-securitisation Exposures	40%	100%	225%	1000% or deduction from Capital Resources

- 4.14.32** (1) In respect of securitisation positions which are assigned a 1000% risk weighting pursuant to the tables in Rule 4.14.31, an Authorised Person may as an alternative to including the position in its calculation of Credit RWA amounts, deduct from its CET1 Capital the Exposure value of such positions.



- (2) For the purposes of this Rule, the calculation of the Exposure value may reflect eligible funded credit protection consistent with applicable Rules in this Chapter.

**4.14.33** For an Authorised Person that is an Originator or Sponsor of a securitisation, the Credit RWA amounts calculated for its securitisation positions may be limited to the RWA amounts which would be calculated for the SE Exposures had they not been securitised subject to the presumed application of a 150% risk weight to all past due items and items belonging to regulatory high risk categories.

**4.14.34** Not currently in use.

**4.14.35** Not currently in use.

### **Exceptions to deduction of unrated securitisation Exposures**

**4.14.36** In accordance with the tables under Rule 4.14.31, all unrated securitisation positions must be deducted or risk weighted at 1000% with the following exceptions:

- (a) most senior Exposure in a securitisation;
- (b) Exposures that are in a second loss position or better of an ABCP and meet the requirements of Rule 4.14.41; and
- (c) eligible liquidity positions.

### **Most senior Exposure in a securitisation**

- (1) Where an Authorised Person holds or guarantees unrated securitisation Exposure from the most senior tranche in a securitisation, the Authorised Person may apply the "look through" treatment, provided the composition of the underlying pool of Exposures securitised is known at all times and the Authorised Person is able to determine the applicable risk weights for the underlying Exposures.
- (2) An Authorised Person applying the look-through treatment to an unrated securitisation Exposure, pursuant to (1), must apply to that securitisation Exposure the weighted average of the risk weights of the underlying Exposures determined in accordance with the Rules in this Chapter, multiplied by a concentration factor.
- (3) For the purposes of (2), the concentration factor is calculated as the sum of the nominal amounts of all the tranches in that securitisation divided by the sum of the nominal amounts of the tranches junior to, or pari-passu with, the tranche in which the position is held, including that tranche itself. The resulting weighted average risk weight must not be higher than 1000% or lower than the risk weight applicable to a more senior tranche which is rated.
- (4) Where the Authorised Person is unable to determine the risk weights for the underlying Exposures in accordance with this Rule, the unrated securitisation position will not be eligible for the relief and must be deducted from CET 1 Capital of the Authorised Person.

**4.14.37** An Authorised Person wishing to apply the treatment referred to in Rule 4.14.37 must notify the Regulator, in writing, at least 30 days in advance, of the



intention to adopt this treatment. The notification should include the treatments being adopted and the weightings applied under the provision.

- 4.14.38** The resulting weighted average risk weight must not be higher than 1000% or lower than the risk weight applicable to a more senior tranche which is rated.
- 4.14.39** An Authorised Person must have systems and controls in place to monitor effectively the composition of Exposures where the look-through provision has been applied on an ongoing basis.

#### **Exposures that are in a second loss position or better of an ABCP**

- 4.14.40** An Authorised Person may apply a risk weight of 100% or the highest risk weight assigned to any of the underlying Exposures in the ABCP Programme, whichever is higher, to an unrated securitisation Exposure arising from the ABCP Programme, provided the securitisation position complies with the following conditions:
- (a) the subject securitisation Exposure must be in a tranche which is economically in a second loss position or better and the First Loss Position must provide meaningful credit protection to the second loss tranche;
  - (b) the associated Credit Risk of the securitisation Exposure is the equivalent of a Credit Quality Grade of III or better in the short-term rating category; and
  - (c) the Authorised Person must not hold a position in the First Loss Position.

#### **Eligible liquidity positions**

- 4.14.41** An Authorised Person providing an unrated eligible liquidity facility may assign to the resulting securitisation Exposure the highest risk weight that would be applied to any of the underlying Exposures covered by the facility.
- 4.14.42** (1) An off balance sheet SE Exposure will receive a 100% CCF unless:
- (a) the Exposure qualifies as an eligible liquidity facility, or
  - (b) the Exposure is an eligible Servicer cash advance facility.
- (2) In relation to (1), an eligible Servicer cash advance facility is a facility provided to a securitisation in order to ensure uninterrupted flow of payments to investors. As long as the Servicer is entitled to full reimbursement and this right is senior to all other claims on cash flows from the underlying pool of Exposures, and where these facilities meet the requirements of 4.14.44 and are unconditionally cancellable at any time, any undrawn commitments can then have a 0% CCF applied.
- 4.14.43** (1) For the purposes of Rule 4.14.42, an Authorised Person may treat an Exposure as an eligible liquidity facility provided the following requirements are met:
- (a) the liquidity facility documentation must clearly identify and limit the circumstances under which it may be drawn;

- (b) draws must be limited to the amount that is likely to be repaid from the liquidation of the underlying Exposures and any seller provided Credit Enhancements;
  - (c) the facility must not provide credit support by covering for any losses incurred in the underlying pool of Exposures prior to drawdown;
  - (d) the facility must not be structured to provide regular or permanent funding;
  - (e) the facility must be subject to an asset quality test to preclude it being used to cover Credit Risk Exposures that are in default;
  - (f) where the facility is used to fund externally rated Securities the facility can only be used to fund Securities that are externally rated Investment Grade at the time of funding;
  - (g) the facility cannot be drawn after all Credit Enhancements from which the liquidity facility would benefit have been exhausted; and
  - (h) repayment of draws of the facility cannot be subordinated to any interests of any note holder in the programme or be subject to deferral or waiver.
- (2) Where the Exposure meets the requirements as set out in (1), the following CCF will apply:
- (a) 50% to the eligible liquidity facility regardless of maturity; and
  - (b) 100% if an external rating of the liquidity facility is used for the risk weighting.

- 4.14.44** (1) An Authorised Person which provides credit protection for a basket of reference Exposures through an unrated first-to-default Credit Derivative may apply to the securitisation Exposure the aggregate of the risk weights that would be assigned to the reference Exposures, provided that the resulting Capital Requirement does not exceed the notional amount of the credit protection.
- (2) An Authorised Person which provides credit protection for a basket of reference Exposures through an unrated second-to-default Credit Derivative may apply the treatment referred to in (1), except that in aggregating the risk weights, the reference Exposure with the lowest risk-weighted amount may be excluded.

### **Overlapping Exposures**

- 4.14.45** (1) Where an Authorised Person has two or more overlapping Exposures to a securitisation, the firm must, to the extent that the positions overlap, include in its calculation of Credit RWA amounts only the Exposure, or portion of the Exposure, producing the higher Credit RWA amounts.
- (2) For the purposes of (1), overlapping Exposures result where an Authorised Person provides two or more facilities (whether they are liquidity facilities or Credit Enhancements) in relation to a securitisation that can be drawn under various conditions with different triggers, with the result that the

Authorised Person provides duplicate coverage to the underlying Exposures. The facilities provided by the Authorised Person may overlap since a draw on one facility may preclude (in part) a draw on the other facility.

- (3) Where the overlapping Exposures are subject to different conversion factors the Authorised Person must apply the higher of the conversion factors to the Exposure.

### **Guidance**

The firm may also recognise such an overlap between capital charges for Specific Risk in relation to positions in the Trading Book and capital charges for positions in the Non-Trading Book, provided that the firm is able to calculate and compare the capital charges for the relevant positions.

However, if overlapping facilities are provided by different Authorised Persons, each Authorised Person must calculate Capital Requirement for the maximum amount of its Exposure.

### **Credit Risk mitigation**

- 4.14.46** Where an Authorised Person obtains credit protection on a securitisation Exposure, the calculation of Credit RWA amounts must be in accordance with the Rules in CRM in Section 4.13.
- 4.14.47** Where an Authorised Person provides credit protection to a securitisation Exposure it must calculate a Capital Requirement as if it were an investor in the securitisation in line with Section 4.13.
- 4.14.48** An Authorised Person must not recognise any SPE which is an Issuer of securitisation Exposures, as an eligible credit protection provider. Guarantees provided must meet the requirements of Section 4.13.
- 4.14.49** For the purpose of setting regulatory capital against a Maturity Mismatch, the Capital Requirement must be determined in accordance with Section 4.13. When Exposures being hedged have different maturities, the longest maturity must be used. Maturity of credit protection must be calculated in accordance with Section 4.13.

### **Capital Requirements for securitisations with Early Amortisation provisions**

- 4.14.50** An Authorised Person which is the Originator or Sponsor of a securitisation involving revolving Exposures as well as an Early Amortisation provision, must calculate an additional RWA amount in accordance with Rule 4.14.57 to address the possibility that its Credit Risk Exposure levels may increase following the operation of the Early Amortisation provision.

### **Guidance**

1. This Section sets out the methodology for calculation of the Credit RWA amount by an Originator, when it sells revolving Exposures into a securitisation that contains an Early Amortisation provision.
2. 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.

- 4.14.51** (1) An Authorised Person which is the Originator or Sponsor of a securitisation involving revolving Exposures, must calculate Credit RWA amounts in respect of the total Exposure related to a securitisation (both drawn and undrawn balances) when:
- (a) the Authorised Person sells Exposures into a structure that contains an Early Amortisation feature; and
  - (b) the Exposures are of a revolving nature.
- (2) Where the underlying pool of a securitisation comprises revolving and term Exposures, an Authorised Person must apply the amortisation treatment outlined below for determining applicable regulatory capital only to that portion of the underlying pool containing revolving Exposures.
- 4.14.52** An Authorised Person which is the Originator of a Revolving Securitisation that includes economic triggers for Early Amortisation may regard the Exposures 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 Person's risk management system provides warning indicators when economic or non-economic triggers may be activated.

### **Guidance**

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

- 4.14.53** An Authorised Person is not required to calculate a Capital Requirement for Early Amortisation in the following situations:
- (a) replenishment structures where the underlying Exposures do not revolve and the Early Amortisation ends the ability of the Authorised Person to add new Exposures;
  - (b) where the risk associated with revolving assets containing amortisation features that mimic term structures, where the risk does not return to the Authorised Person;
  - (c) structures where the Authorised Person securitises one or more credit lines and where investors remain fully exposed to future draws by borrowers so that the risk on the underlying facilities does not return to the Originator even after an Early Amortisation event has occurred; or
  - (d) where the Early Amortisation clause is solely triggered by events not related to the performance of the securitised assets or the Authorised Person, such as material changes in tax laws or regulations.

**4.14.54** For an Authorised Person subject to the Capital Requirement referred to in Rule 4.14.51, the maximum Credit RWA calculated under that Rule must not exceed the greater of the following:

- (a) the RWA amounts calculated in respect of its positions in the investors' interest; or
- (b) the RWA amounts that would be calculated in respect of the securitised Exposures, if those had not been securitised.

**4.14.55** An Authorised Person must deduct from its CET1 Capital any gain-on-sale and Credit-Enhancing Interest-Only Strips arising from any securitisation subject to the provisions of the Rules above.

**Calculation of Credit RWA amounts for securitisation positions subject to Early Amortisation clause**

**4.14.56** In regard to securitisation positions subject to an Early Amortisation clause, the Credit RWA amounts for an Authorised Person acting as the Originator are calculated as the product of the following:

- (a) the investors' interest;
- (b) the appropriate CCF (in accordance with the table in Rule 4.14.61); and
- (c) the appropriate risk weight for the underlying Exposure type.

**Guidance**

In relation to Rule 4.14.57(c), the Authorised Person should also consider whether a line, or facility, is committed or uncommitted. A line is considered to be uncommitted if it is unconditionally cancellable without prior notice by the Authorised Person. They also differ according to whether the securitised Exposures are committed retail credit lines or credit lines (such as revolving credit facilities).

**4.14.57** (1) An Early Amortisation provision that does not satisfy the conditions for a Controlled Early Amortisation provision will be treated as a non-Controlled Early Amortisation provision.

(2) For the purpose of (1), the conditions for a Controlled Early Amortisation provision are as follows:

- (a) the Authorised Person must have an appropriate capital/liquidity plan in place to ensure that it has sufficient capital and liquidity available in the event of an Early Amortisation;
- (b) throughout the duration of the transaction, including the amortisation period, there is the same pro rata sharing of interest, principal, expenses, losses and recoveries based on the firm's and investors' relative shares of the receivables outstanding at the beginning of each month;
- (c) the firm must set a period for amortisation that would be sufficient for at least 90% of the total debt outstanding at the beginning of the Early Amortisation period to have been repaid or recognised as in default; and

- (d) the pace of repayment should not be any more rapid than would be allowed by straight-line amortisation over the period set out in (c).

**4.14.58** For uncommitted retail credit lines in securitisations containing Controlled Early Amortisation which is triggered by the Excess Spread level falling to a specified level, an Authorised Person must compare the three month average Excess Spread level with the Excess Spread levels at which the Excess Spread is required to be trapped.

**4.14.59** Where the securitisation does not require Excess Spread to be trapped, the trapping point is deemed to be 4.5 percentage points greater than the Excess Spread level at which Early Amortisation is triggered.

**4.14.60** An Authorised Person must divide the Excess Spread level by the transaction's Excess Spread trapping point to determine the appropriate segments and apply corresponding conversion factors as set out in the following table:

<b>Controlled Early Amortisation Features</b>		
	<b>Uncommitted</b>	<b>Committed</b>
Retail Credit Lines	3 Month average Excess Spread CCF	90%
133.33% of trapping point or more	0%	
<133.33% to 100% of trapping point	1%	
<100% to 75% of trapping point	2%	
<75% to 50% trapping point	10%	
<50% to 25% of trapping point	20%	
<25%	40%	
Non-retail credit lines	90%	90%

#### **Non-Controlled Early Amortisation**

**4.14.61** In regard to non-Controlled Early Amortisation, an Authorised Person must apply the same steps as set out at Rules 4.14.59 to 4.14.61 and determine appropriate segments and apply the corresponding conversion factors as set out in the following table:

<b>Non-Controlled Early Amortisation Features</b>		
	<b>Uncommitted</b>	<b>Committed</b>
Retail Credit Lines	3 Month average Excess Spread CCF	100%
133.33% of trapping point or more	0%	
<133.33% to 100% of trapping point	5%	

Non-Controlled Early Amortisation Features		
	Uncommitted	Committed
<100% to 75% of trapping point	15%	
<75% to 50% trapping point	50%	
<50% of trapping point	100%	
<b>Non-retail credit lines</b>	<b>100%</b>	<b>100%</b>

### Transfers to Special Purpose Entities (SPEs)

**4.14.62** An Authorised Person need not include in its calculation of Capital Resources or Credit RWA amounts, assets transferred to:

- (a) an SPE; or
- (b) any Person, if the transfer is in connection with a securitisation under which the Issuer of the Securities is an SPE,

provided that:

- (c) the Authorised Person does not own any Share or proprietary interest in the SPE;
- (d) no more than one member of the Governing Body of the SPE is an officer, Partner, or Employee of the Authorised Person;
- (e) the SPE does not have a name that implies any connection with the Authorised Person or any other member of the Authorised Person's Group;
- (f) the Authorised Person does not fund the SPE except where permitted under the requirements for Credit Enhancement below;
- (g) the Authorised Person does not provide temporary finance to the SPE to cover cash shortfalls arising from delayed payments or non-performance of loans transferred except where it meets the requirements for liquidity support below;
- (h) the Authorised Person does not bear any of the recurring expenses of the SPE; and
- (i) any agreements between the Authorised Person and the SPE are at market rates and at arm's length.

**4.14.63** 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

**4.14.64** An Originator dealing in Securities which would attract a Credit Quality Grade of 4 or better and issued by an SPE must deduct any holdings in such Securities from its CET1 Capital 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.

**4.14.65** An Authorised Person acting as the Originator and holding in excess of the dealing limits in Rule 4.14.65 must either:

- (a) where the holding is less than 10%, deduct from its CET1 Capital 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.

**4.14.66** An Authorised Person acting as the Originator must not deal in the Securities during the amortisation period.

**4.14.67** An Authorised Person acting as the Sponsor dealing in the Securities issued by the SPE must include these Securities in the calculation of its Credit RWAs.

**4.14.68** An Authorised Person involved in Synthetic Securitisations must seek individual guidance on a case-by-case basis from the Regulator regarding the regulatory capital treatment of such transactions.

#### **Recognition of eligible financial Collateral under FCSA Approach**

**4.14.69** An Authorised Person which has taken eligible financial Collateral for an SE Exposure and is using the FCSA may recognise the effect of the eligible financial Collateral as follows:

- (a) break down the SE Exposure into:
  - (i) a collateralised portion with E equal to the latest fair market value of the eligible financial Collateral; and
  - (ii) an uncollateralised portion whose Exposure value equals the E of the SE Exposure less the latest fair market value of the eligible financial Collateral; and
- (b) apply the CRW that is applicable to the eligible financial Collateral to the collateralised portion calculated in accordance with (a)(i) to calculate the Credit RWA amount of the collateralised portion as though the Authorised Person had a direct Exposure to the eligible financial Collateral; and
- (c) either:
  - (i) apply the CRW that is applicable to the SE Exposure to the uncollateralised portion calculated in accordance with (a)(ii) to calculate the Credit RWA amount of the uncollateralised portion; or
  - (ii) include the uncollateralised portion as a deduction from CET1 Capital.



## Guidance

Collateral in the context of a SE Exposure refers to assets used to hedge the Credit Risk of a securitisation Exposure rather than the underlying Exposures of the securitisation, including Collateral pledged by an SPE.

### 4.15 Large Exposures

#### Applicability and limits

**4.15.1** This Section applies with respect to Trading Book transactions as calculated in App2 and Non-Trading Book transactions as calculated in Section 4.8.

**4.15.2** For the purposes of this Section an Exposure that arises in the Trading Book is calculated by summing the following:

- (a) the net positive position (long positions net of short positions) for each Financial Instrument as set out in Rules A4.11.10 to A4.11.28;
- (b) the firm's net Underwriting Exposures for any Counterparty; and
- (c) any other Exposures arising from transactions, agreements and contracts that would give rise to Counterparty Credit Risk.

**4.15.3** For the purposes of this Section an Authorised Person must:

- (a) identify its Exposures;
- (b) identify its Counterparties, including whether any are Closely Related to each other or Connected to the Authorised Person;
- (c) measure the size of its Exposures;
- (d) establish the value of its Exposures;
- (e) determine the size of its Exposures as a proportion of its Tier 1;
- (f) identify whether it has Exposures which are subject to the requirements of Section 4.13 (CRM);
- (g) identify which, if any, of its Exposures are exempt in accordance with Section A4.11 from the limits set out in Rules 4.15.4 to 4.15.7;
- (h) aggregate its Exposures to the same Counterparty or group of Closely Related Counterparties or group of Connected Counterparties;
- (i) monitor and control its Exposures on a daily basis within the Large Exposures limits; and
- (j) notify the Regulator immediately of any breach of the limits set out in this Section and confirm it in writing.

#### Large Exposures limits

**4.15.4** A Large Exposure of an Authorised Person means a total Exposure which is equal to or greater than 10% of the firm's Tier 1, to any Counterparty, group of Connected

Counterparties, or group of Closely Related Counterparties, aggregated across the Authorised Person's Trading Book and Non-Trading Book.

**4.15.5** Subject to IFR Rule 5.4.15, an Authorised Person must not incur any Large Exposures in its Non-Trading Book and, subject to Rule 4.15.6, Trading Book after taking into account the effect of any eligible CRM, that exceeds 25% of its Tier 1.

**4.15.6** Where the portion of a Large Exposure in an Authorised Person's Trading Book on its own or when added to any Non-Trading Book portion of a Large Exposure, is likely to cause the 25% limit of its Tier 1 to be exceeded, the Authorised Person must immediately give the Regulator written notice, explaining the nature of its Trading Book Exposure and seeking specific guidance from the Regulator regarding the prudential treatment of any such Exposure.

#### **Guidance**

1. The effect of Rules 4.15.5 and 4.15.6, when taken together, impose a binding upper limit of 25% of Tier 1 on the portion of a Large Exposure in the Non-Trading Book.
2. Where, under exceptional circumstances, the portion of the Large Exposure arising in the Trading Book causes the aggregate limit of 25% to be exceeded the Authorised Person is obliged to notify the Regulator in order to agree remedial actions to resolve the breach at the earliest opportunity.

**4.15.7** Subject to IFR Rule 5.4.16 an Authorised Person must ensure that the sum of its Large Exposures does not exceed 800% of its Tier 1.

#### **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 Person 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 Person's business.
4. App4 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.

### **Exclusions from the Large Exposures limits**

**4.15.8** (1) For the purposes of this Section, Exposure excludes:

- (a) claims and other assets required to be deducted for the purposes of calculating an Authorised Person's Tier 1;
- (b) a transaction entered into by an Authorised Person as depository or as agent that does not create any legal liability on the part of the Authorised Person;
- (c) claims resulting from foreign exchange transactions where an Authorised Person has paid its side of the transaction and the countervalue remains unsettled during the two business days following the due payment or due delivery date. After two business days the claim becomes an Exposure;
- (d) claims arising as a result of Money transmission, payment services, clearing and settlement, correspondent banking or Financial Instruments clearing, settlement and custody services to clients, delayed receipts in funding and other Exposures arising from Client activity which do not last longer than the following business day;
- (e) in the case of the services outlined in (d) intra-day Exposures to Financial Institutions who provide these services are excluded;
- (f) claims resulting from the purchase and sale of Securities during settlement where both the Authorised Person 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; and
- (g) Exposures that are guaranteed by the Authorised Person's Parent in accordance with Rule 4.15.18.

(2) For the purposes of this Section, Exposure to a central counterparty which carry a 0% CCF in accordance with Section 4.8 are excluded.

**4.15.9** An Authorised Person need not include fully exempt Exposures, as referred to in Rule A4.11.1 when monitoring compliance with the limits in Rules 4.15.5, 4.15.6 and 4.15.7.

### **Institutional exemption**

**4.15.10** For Exposures to a Financial Institution, or a group of Connected Counterparties one of which is a Financial Institution, the total amount of an Authorised Person's Exposures may exceed 25% of its Tier 1, provided those institutions are Investment Grade (Credit Quality Grades 1 to 3) and subject to the following:

- (a) Exposures to any entities within the group of Connected Counterparties that are not Financial Institutions are limited to 25% of Tier 1 after taking account of CRM;
- (b) the Exposures must not form part of the Tier 1 of the Counterparty;
- (c) the Counterparty Risk profile must be subject to review on at least an annual basis; and
- (d) Exposures of this nature must not in any case exceed a maximum of \$100 million or 100% of Tier 1, whichever is the lower.

### **Guidance**

The Regulator will, in exceptional circumstances, consider an application to waive or modify the limits set out above. In such circumstances the Authorised Person will have to make a submission to the Regulator as to why its specific circumstances would warrant a relaxation of the limits specified in (d) above.

### **Systems and Controls**

- 4.15.11** (1) An Authorised Person must implement and maintain systems and controls to identify its Exposures and effectively manage Large Exposures as a result of its activities.
- (2) Such systems and controls in place must be proportionate to the nature, scale and complexity of the Authorised Person and must include written policies and procedures to address Large Exposures, both on and off balance sheet, which:
- (a) are approved by the Governing Body on at least an annual basis; and
  - (b) include internal approval limits for Exposures as well as limits for the risks associated with specific sectors, geographic location and single economic risk factors.

### **Guidance**

The Regulator expects the systems and controls to include:

- a. processes for the tiered approval of Exposures based on size, risk profile and complexity;
- b. mechanisms for identifying, recording and monitoring all Exposures with particular focus on Large Exposures;
- c. mechanisms in place for the monitoring and control of Exposures to Counterparties and Groups of Connected Counterparties;
- d. mechanisms for monitoring and recording Exposures within its Group;
- e. mechanisms to monitor Counterparties in the same economic sector and exposed to single economic risks;

- f. mechanisms to identify and control risks arising from single geographic jurisdictions; and
- g. mechanisms to identify risks arising from related activities or commodities.

### **Recognition of Credit Risk mitigations**

**4.15.12** For the purposes of this Section, an Authorised Person may reduce 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 4.13 of CRM are met;
- (c) the amount of Collateral held against its Exposures, where that Collateral is of a type listed based on the FCSA and FCCA approaches and meeting the requirements under Section 4.13;
- (d) the amount of any eligible guarantees as permitted under Section 4.13.9;
- (e) the value of a Credit Derivative, where the Credit Derivative is an instrument included in Rule 4.13.11 and the transaction meets the conditions set out in that Section; and
- (f) the effects of transactions transferring Credit Risks from the Authorised Person to another party through securitisation, provided that the conditions in Section 4.14 are met.

**4.15.13** An Authorised Person intending to utilise any of the provisions contained in Section 4.13 (CRM) for the purposes of reducing Exposure values should have in place policies and procedures addressing the following:

- (a) risks arising from Maturity Mismatches between Exposures and any credit protection on those Exposures;
- (b) any Large Exposures risks arising from the application of CRM techniques, including indirect Large Exposures – for example to a single Issuer of Securities taken as Collateral; and
- (c) the conduct of stress testing on CRM taken as Collateral.

**4.15.14** Where an Authorised Person has availed itself of the reductions to Exposure values as set out in A4.11 the Authorised Person must calculate the Exposure as a percentage of its Tier 1 on both a gross and net basis.

**4.15.15** An Authorised Person that avails itself of the reduction in its Exposure value through the application of Rule A4.11 must conduct periodic stress tests on its Exposures against the realisable value of any Collateral considered under with the FCSA or FCCA.

**4.15.16** Where the value of the Collateral under the stress scenario is lower than the value applied under Rule 4.15.12 the lower value should be used when determining the Exposure value for the purposes of this Section.

### **Guidance**

Such stress tests should include market value changes of underlying Collateral, risks relating to liquidity and realisation of such Collateral in stress scenarios. An assessment of the impact of any such changes on the Exposure value and the capital position of the Authorised Person should be conducted. Stress testing of these positions should be conducted at least once a year.

- 4.15.17** An Authorised Person must document its policy for the use of any of the exclusions in Rule 4.15.12.

### **Guidance**

Such policy should include risks such as Maturity Mismatches, stress testing of Collateral values, indirect Exposures arising from CRM, such as mitigation provided on Exposures by the same Counterparty.

### **Treatment of parental guarantees**

- 4.15.18** An Authorised Person may exclude an Exposure from the Large Exposure limits set out in Rules 4.15.5 to 4.15.7 if the Authorised Person's Parent;

- (a) is set to increase, on the basis of a legally binding agreement, the Authorised Person's Tier 1, promptly and on demand, by:
  - (i) an amount that is sufficient to reverse completely the effect of any loss the Authorised Person may sustain in connection with that Exposure; or
  - (ii) the amount required to ensure that the Authorised Person complies with its Capital Requirement set out in Chapter 3; or
- (b) guarantees the Exposure to a Counterparty or to a group of Closely Related Counterparties which are not Connected to the Authorised Person only if the following conditions are met:
  - (i) the guarantee is to be provided by the Authorised Person's Parent, or regulated member of its Group;
  - (ii) the criteria for guarantees must be in line with the CRM requirements as set out in Section 4.13;
  - (iii) the entity providing the guarantee must be a bank regulated to standards acceptable to the Regulator;
  - (iv) the total amount of guarantees provided to the Authorised Person must be less than 10% of the Tier 1 of the entity providing the guarantee;
  - (v) the Parent must have an external credit assessment from a recognised credit rating agency that corresponds to a Credit Quality Grade 1 or 2;
  - (vi) the Authorised Person must provide confirmation from the Home State Regulator of the entity providing the guarantee that it is

satisfied that the entity providing the guarantee has sufficient resources to provide such guarantees and has no objection to the provision of such guarantees;

- (vii) the Authorised Person should provide an annual confirmation that there are no changes to the enforceability of such guarantees; and
- (viii) the Authorised Person must notify the Regulator when such guarantees represent 200%, 400% and 600% of Tier 1. The overall Large Exposure limit of 800% will apply.

## **5 MARKET RISK**

### **Introduction**

#### **Guidance**

1. This Chapter addresses the capital requirements in respect of managing the Market Risk Exposures of an Authorised Person. Market Risk refers to the risk of incurring losses on positions held by an Authorised Person with trading intent, due to adverse changes in market prices or in underlying value drivers. This Chapter aims to ensure that an Authorised Person engaging in activities exposing the firm to risks associated with potential adverse movements in market prices adopts adequate, appropriate, sound and effective risk management practices and holds regulatory capital of the right quality that is also commensurate with the risks involved.
2. This Chapter includes requirements that an Authorised Person:
  - a. implement a comprehensive Market Risk management framework to manage, measure and monitor Market Risk commensurate with the nature, scale and complexity of the firm's operations; and
  - b. calculate the Market Risk Capital Requirement and hold the same.
3. The Chapter allows the use of standard pre-defined methodologies for estimating the Capital Requirement and also allows the use of internal models approved by the Regulator to calculate a firm's Market Risk Capital Requirement. The Chapter covers Rules for determining Market Risk Capital Requirement on Exposures involving interest rate risk, equity risk, foreign exchange risk, commodities risk, Options risk, Collective Investment Fund risk and Securities Underwriting risk.
4. App6 provides the detailed requirements, parameters, calculation methodologies and formulae in respect of the primary requirements outlined in Chapter 5. App6 also provides detailed guidance on criteria for approval of internal models for calculation of Market Risk Capital Requirement, incorporation of incremental risk charges in internal models, if allowed and guidance on the required level of stress testing.

### **5.1 Application**

**5.1.1** This Chapter applies to an Authorised Person in Category 1, 2, 3A or 5 as follows:

- (a) Sections 5.2 to 5.11 apply to an Authorised Person in Category 1 or 2;
- (b) Sections 5.2 and 5.6 apply to an Authorised Person in Category 3A; and
- (c) Sections 5.2, 5.3 and 5.5 to 5.11 apply to an Authorised Person in Category 5.

#### **Guidance**

1. Rule 5.3.1 provides that the Market Risk Capital Requirement of an Authorised Person is calculated as the sum of a number of Subsidiary Capital Requirements. Sections 5.4 to 5.10 set out the manner in which each of



those Subsidiary Capital Requirements must be calculated, monitored and controlled by an Authorised Person.

2. In addition to complying with the applicable Rules in Chapter 5, an Authorised Person investing in or holding Islamic Contracts whether or not for the purpose of a PSIA will need to take account of the provisions under the IFR rules to calculate the Market Risk for those Islamic Contracts.

## **5.2 Market Risk systems and controls**

- 5.2.1**
- (1) An Authorised Person in Category 1, 2, 3A or 5 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 Person's risk appetite and how it identifies, assesses, mitigates, controls and monitors that risk.
  - (3) An Authorised Person 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; and
    - (c) review and update the policy at intervals that are appropriate to the nature, scale and complexity of its activities.

### **Guidance**

Guidance in respect of what an Authorised Person's Market Risk policy should include is provided in Section A6.1.

## **5.3 Calculation of the Market Risk Capital Requirement**

- 5.3.1** An Authorised Person must calculate its Market Risk Capital Requirement as the sum of the following components:
- (a) Interest Rate Risk Capital Requirement;
  - (b) Equity Risk Capital Requirement;
  - (c) Foreign Exchange Risk Capital Requirement;
  - (d) Commodities Risk Capital Requirement;
  - (e) Option Risk Capital Requirement;
  - (f) Collective Investment Fund Risk Capital Requirement; and
  - (g) Securities Underwriting Capital Requirement.

## Guidance

1. Detailed Rules and Guidance in respect of the Market Risk Capital Requirement and each of its components in (a) to (g) are contained in this Chapter.
2. Rules and Guidance in respect of calculating Market Risk for Islamic Contracts are contained in the IFR rules.

### 5.4 Interest Rate Risk Capital Requirement

#### 5.4.1 An Authorised Person in Category 1 or 2 must calculate its Interest Rate Risk Capital Requirement in respect of Trading Book transactions:

- (a) by applying its internal Market Risk model which has been approved by the Regulator for this purpose; or
- (b) by applying the Rules set out in Section A6.2.

### 5.5 Equity Risk Capital Requirement

#### 5.5.1 An Authorised Person in Category 1, 2 or 5, must calculate its Equity Risk Capital Requirement in respect of Trading Book transactions:

- (a) by applying its internal Market Risk Model which has been approved by the Regulator for this purpose; or
- (b) by applying the Rules set out in Section A6.3.

### 5.6 Foreign Exchange Risk Capital Requirement

#### 5.6.1 An Authorised Person in Category 1, 2, 3A or 5 must, subject to Rule 5.6.2, calculate its Foreign Exchange Risk Capital Requirement in respect of Trading Book and Non-Trading Book foreign exchange positions by:

- (a) applying its internal Market Risk model which has been approved by the Regulator for this purpose; or
- (b) applying the Rules in Section A6.4.

#### 5.6.2 An Authorised Person 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 3; and
- (b) its overall net open position as defined in Rule A6.4.4 does not exceed 2% of its Capital Resources as defined in Chapter 3.

### 5.7 Commodities Risk Capital Requirement

#### 5.7.1 An Authorised Person in Category 1, 2 or 5 must calculate its Commodities Risk Capital Requirement in respect of Trading Book and Non-Trading Book commodity positions by:

- (a) applying its internal Market Risk model which has been approved by the Regulator for this purpose; or
- (b) applying the Rules set out in Section A6.5.

## **5.8 Option Risk Capital Requirement**

**5.8.1** An Authorised Person in Category 1, 2 or 5 must calculate an Option Risk Capital Requirement if it has positions in Options in its Trading Book by:

- (a) applying its internally developed Market Risk model which has been approved by the Regulator for this purpose; or
- (b) by applying the Rules set out in Section A6.6.

## **5.9 Collective Investment Fund Risk Capital Requirement**

**5.9.1** An Authorised Person in Category 1, 2 or 5 must calculate its Collective Investment Fund Risk Capital Requirement in respect of Trading Book positions in Units in a Collective Investment Fund by:

- (a) applying its internally developed Market Risk model which has been approved by the Regulator for this purpose; or
- (b) applying the Rules set out in Section A6.7.

## **5.10 Securities Underwriting Capital Requirement**

**5.10.1** This Section applies to an Authorised Person 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 Person has commitments to underwrite an issue of Securities, and the associated risk management standards which an Authorised Person Underwriting Securities must meet.

**5.10.2** An Authorised Person 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 Person 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 Person 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 Person'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.

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

(2) An Authorised Person 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.

**5.10.4** An Authorised Person must regard a commitment to underwrite an issue of Securities, subject to any right set out in Rule 5.10.6, as the initial commitment to underwrite from the earlier of:

- (a) the time the Authorised Person 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.

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

**5.10.6** If an Authorised Person 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.

**5.10.7** An Authorised Person must calculate its Securities Underwriting Risk Capital Requirement by:

- (a) applying its internally developed Market Risk model which has been approved by the Regulator for this purpose; or
- (b) applying the Rules in Section A6.8.

## **5.11 Use of internal Market Risk models**

**5.11.1** An Authorised Person 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 the use of such internally developed models has been approved in writing by the Regulator.

**Guidance**

Guidance in respect of criteria for use of internally developed Market Risk models is provided in Section A6.9.

**5.11.2** If the Regulator approves the use of an internal model, 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 Person's Market Risk Capital Requirement or any component of it.

**5.11.3** An Authorised Person which uses an internal model in accordance with Rule 5.11.1 must have in place a rigorous and comprehensive stress-testing programme which meets the criteria set out in Rule A6.9.4.

**5.11.4** An Authorised Person 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 App6 with the prior written consent of the Regulator.

**Guidance**

1. This Section sets out the conditions under which an Authorised Person 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 Person that wishes to use an internal model to calculate any part of this requirement is required to apply to the Regulator. Internal models will commonly permit more extensive Netting of long and short positions and have greater risk sensitivity.
2. In assessing whether to give approval, the Regulator will consider an Authorised Person'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 Regulator 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 Regulator is satisfied having been provided by the Authorised Person 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 Person. Specifically, the Governing Body and senior management of the Authorised Person receives and reviews appropriate reports in respect of the entity;
  - c. it is satisfied that the Authorised Person's risk management system is conceptually sound and is implemented with integrity;

- d. the Authorised Person 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 Person's models have a proven track record of reasonable accuracy in measuring risk; and
  - f. the Authorised Person regularly conducts stress tests.
- 4. In determining whether an internal value at risk (VaR) model meets the standard for approval, the Regulator will apply the criteria set out in Section A6.9, which are based on the Basel Market Risk Capital Amendment 1996 and Basel Revisions to the Basel II Market Risk framework 2009 and which can be grouped under the following headings:
  - a. qualitative standards;
  - b. specification of Market Risk factors;
  - c. quantitative standards;
  - d. adjustments to Market Risk Capital Requirements;
  - e. stress testing; and
  - f. combination of internally developed models and the Standardised Methodology.
- 5. In addition to value-at-risk models, the Regulator 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 Person's interest rate Market Risk Capital Requirement calculation under the Duration Method.

## **6 OPERATIONAL RISK**

### **Introduction**

#### **Guidance**

1. This Chapter includes the detailed Rules and associated guidance in respect of a firm's obligation to manage effectively its Exposures to Operational Risk. Operational Risk refers to the risk of incurring losses due to the failure of systems, processes, and personnel to perform expected tasks. Operational Risk losses also include losses arising out of legal risk. This Chapter aims to ensure that an Authorised Person has a robust Operational Risk management framework commensurate with the nature, scale and complexity of its operations and that it holds sufficient regulatory capital against Operational Risk Exposures.
2. This Chapter requires an Authorised Person to:
  - a. design and implement an effective Operational Risk management system complete with appropriate systems and controls;
  - b. calculate the Operational Risk Capital Requirement and hold the same; and
  - c. hold adequate professional indemnity insurance cover.
3. This Chapter includes, among others, specific Operational Risk management requirements relating to IT systems, information security, outsourcing, business continuity and disaster recovery and the management of Operational Risks in trading rooms.
4. App7 provides the detailed requirements, parameters, calculation methodologies and formulae for calculating the Operational Risk Capital Requirement specified in Chapter 6.

### **6.1 Application**

#### **6.1.1** This Chapter applies to an Authorised Person as follows:

- (a) Sections 6.1 to 6.9 apply to an Authorised Person in any Category;
- (b) Sections 6.10 and 6.11 apply only to an Authorised Person in Category 1, 2, 3A or 5;
- (c) Section 6.12 applies only to an Authorised Person in Category 3B, 3C or 4.

#### **Guidance**

The GEN rules contain Rules and Guidance in relation to Systems and Controls, some of which may relate to the management of Operational Risk. The Corporate Governance rules in the GEN rules set out overarching requirements in relation to Board responsibilities, including risk management. The Rules and Guidance in this Section seek to complement the aforementioned requirements, while providing for a framework to address matters which directly relate to Operational Risk management.

### **6.2 Risk management framework and governance**



- 6.2.1** (1) An Authorised Person must implement and maintain an Operational Risk policy which enables it to identify, assess, control and monitor Operational Risk.
- (2) The policy must be documented and provide for a sound and well-defined risk management framework to address the Authorised Person's Operational Risk.
- (3) An Authorised Person must:
- (a) ensure that its risk management systems enable it to implement the Operational Risk policy;
  - (b) identify, assess, mitigate, control and monitor the risk; and
  - (c) review and update the policy at intervals that are appropriate to the nature, scale and complexity of its activities.

- 6.2.2** An Authorised Person must ensure that its Governing Body approves the Operational Risk policy in Rule 6.2.1.

### **Guidance**

1. Some of the key aspects that an Authorised Person should consider in its Operational Risk policy include:
  - a. the governance structures used to manage Operational Risk, including reporting lines and accountabilities;
  - b. risk assessment tools and how they are used;
  - c. the Authorised Person's accepted Operational Risk appetite, permissible thresholds or tolerances for inherent and residual risk, and approved risk mitigation strategies and instruments;
  - d. the Authorised Person's approach to establishing and monitoring thresholds or tolerances for inherent and residual risk Exposure;
  - e. risk reporting and MIS; and
  - f. appropriate independent review and assessment of the Authorised Person's Operational Risk framework.
2. An Authorised Person's Operational Risk policy should, amongst other things, include consideration of Principles for the Sound Management of Operational Risk, issued by the BCBS and the Guidelines on the management of Operational Risk in market-related activities issued by the European Banking Authority which are useful in relation to activities other than banking.

### **Governing Body responsibilities**

1. The GEN rules contain Rules and Guidance regarding corporate governance requirements for Authorised Persons, including the responsibilities of an Authorised Person regarding risk management.

2. In developing, implementing and maintaining an effective Operational Risk framework, an Authorised Person's Governing Body should:
  - a. approve and review a risk appetite and tolerance for Operational Risk that articulates the nature, types and levels of Operational Risk that the Authorised Person is willing to assume;
  - b. consider all relevant risks, the Authorised Person's level of risk appetite, its current financial condition and its strategic direction. The Governing Body should monitor management adherence to the risk appetite and tolerance and provide for timely detection and remediation of breaches;
  - c. encourage a management culture, and develop supporting processes, which help to engender within the Authorised Person an understanding by relevant Employees of the nature and scope of the Operational Risk inherent in the Authorised Person's strategies and activities;
  - d. provide senior management with clear guidance and direction regarding the principles underlying the Authorised Person's Operational Risk management framework and approve the corresponding policies developed by senior management;
  - e. regularly review the Authorised Person's Operational Risk policy to ensure that the Authorised Person has identified and is managing the Operational Risk arising from external market changes and other environmental factors, as well as those Operational Risks associated with new strategies, products, activities, or systems, including changes in risk profiles and priorities (e.g. changing business volumes). Such review should also take into account the Operational Risk loss experience, the frequency, volume or nature of limit breaches, the quality of the control environment and the effectiveness of risk management or mitigation strategies;
  - f. ensure that the Authorised Person's Operational Risk policy and framework is subject to effective independent review by audit or other appropriately-trained Persons;
  - g. ensure that management is incorporating industry best practice in managing Operational Risk; and
  - h. establish clear lines of management responsibility and accountability for implementing a strong control environment. The control environment should provide appropriate independence/separation of duties between Operational Risk control functions, business lines and support functions.

### **Senior Management Responsibilities**

1. The GEN rules contain Rules and Guidance regarding senior management arrangements for Authorised Persons.
2. In relation to establishing and maintaining a robust Operational Risk framework, an Authorised Person's senior management should:

- a. translate the Operational Risk management framework established by the Governing Body into specific policies and procedures that can be implemented and verified within the different business units;
- b. clearly assign authority, responsibility and reporting relationships to encourage and maintain accountability, and to ensure that the necessary resources are available to manage Operational Risk in line within the Authorised Person's risk appetite and tolerance; and
- c. ensure that the management oversight process is appropriate for the risks inherent in a business unit's activity.

### **6.3 Risk identification and assessment**

#### **6.3.1 An Authorised Person must:**

- (a) ensure that it identifies and assesses the Operational Risks inherent in all the Authorised Person's products, activities, processes and systems;
- (b) ensure the inherent risks in (a) are understood by relevant Employees of the Authorised Person;
- (c) systematically track Operational Risk events and any financial impact associated with such events; and
- (d) ensure that the tracking in (c) is consistent with the Operational Risk event types described in the Basel III framework.

#### **Guidance**

1. An Authorised Person should record all Operational Risk events, including near misses and events which result in a positive financial outcome.
2. These Rules complement related Rules in the GEN rules relating to risk management systems and controls. For example, GEN requires an Authorised Person to appoint an individual to advise its Governing Body and senior management as to risks.

#### **6.3.2 An Authorised Person must ensure that its Operational Risk policy in Rule 6.2.1:**

- (a) includes an approval process for all new products, activities, processes and systems; and
- (b) incorporates the requirement in Rule 6.3.1(a).

#### **Guidance**

1. An Authorised Person should have policies and procedures that address the process for review and approval of new products, activities, processes and systems. The review and approval process should include consideration of:
  - a. inherent risks in any new product, service, or activity;
  - b. resulting changes to the Authorised Person's Operational Risk profile, appetite and tolerance, including changes to the risk of existing products or activities;

- c. necessary controls, risk management processes, and risk mitigation strategies;
  - d. residual risk;
  - e. changes to relevant risk limits;
  - f. procedures and metrics to measure, monitor, and manage the risk of the new product or activity; and
  - g. appropriate investment in human resources and technology infrastructure.
- 2. Tools that an Authorised Person may employ for identifying and assessing Operational Risk include:
  - a. internal loss data collection and analysis;
  - b. external data collection and analysis;
  - c. risk assessments;
  - d. business process mapping;
  - e. risk and performance indicators; and
  - f. scenario analysis.

## **6.4 Risk monitoring and reporting**

### **6.4.1 An Authorised Person must:**

- (a) regularly monitor material Exposures to Operational Risk losses;
- (b) ensure that appropriate reporting mechanisms are in place at its Governing Body, senior management, and business line levels to support effective management of the Authorised Person's Operational Risk; and
- (c) immediately notify the Regulator of any material Operational Risk event including notification of any resulting financial impact, positive or negative, associated with such event.

### **Guidance**

- 1. The GEN rules require an Authorised Person or Recognised Body to establish and maintain arrangements to provide its Governing Body and senior management with the information necessary to organise and control its activities, to comply with legislation applicable in the ADGM and to manage risks.
- 2. Rule 6.4.1 is intended to complement GEN and requires Authorised Persons to establish and maintain reporting mechanisms specifically addressing the Operational Risk matters.

3. The frequency of internal reporting of Operational Risks required by Rule 6.4.1(b) should reflect the risks involved and the pace and nature of changes in the Authorised Person's operating environment.
4. The following lists some of the items that an Authorised Person should consider including in its internal reporting of Operational Risks:
  - a. the results of monitoring activities;
  - b. assessments of the Operational Risk framework performed by control functions such as internal audit, compliance, risk management and/or external audit;
  - c. reports generated by (and/or for) supervisory authorities;
  - d. material breaches of the Authorised Person's risk appetite and tolerance with respect to Operational Risk;
  - e. details of recent significant internal Operational Risk events and losses, including near misses or events that resulted in a positive return; and
  - f. relevant external events and any potential impact on the Authorised Person and its Operational Risk framework, including Operational Risk capital.

## **6.5 Control and mitigation**

### **Guidance**

1. The GEN rules require an Authorised Person or Recognised Body to establish and maintain systems and controls, including but not limited to financial and risk systems and controls that ensure that its affairs are managed effectively and responsibly by its senior management.
2. In complying with the GEN rules, an Authorised Person should establish and maintain a strong control environment that uses policies, processes and systems, appropriate internal controls and appropriate risk mitigation and/or transfer strategies.
3. In establishing systems and controls to address Operational Risk an Authorised Person should consider the following:
  - a. clear segregation of duties and dual control;
  - b. clearly established authorities and/or processes for approval;
  - c. close monitoring of adherence to assigned risk limits or thresholds;
  - d. safeguards for access to, and use of, the Authorised Person's assets and records;
  - e. appropriate staffing level and training to maintain expertise;
  - f. ongoing processes to identify business lines or products where returns appear to be out of line with reasonable expectations; and

- g. regular verification and reconciliation of transactions and accounts.

## **6.6 Information Technology (IT) systems**

### **6.6.1** An Authorised Person must establish and maintain:

- (a) appropriate information technology policies and processes to identify, assess, monitor and manage technology risks; and
- (b) appropriate and sound information technology infrastructure to meet its current and projected business requirements, under normal circumstances and in periods of stress, which ensures data and system integrity, security and availability and supports integrated and comprehensive risk management.

#### **Guidance**

1. IT systems include the computer systems and information technology infrastructure required for the automation of processes and systems, such as application software, operating system software, network infrastructure, and desktop, server and mainframe hardware.
2. An Authorised Person should consider the following in establishing its systems and controls for the management of IT system risks:
  - a. governance and oversight controls that ensure technology, including outsourcing arrangements, is aligned with and supportive of the Authorised Person's business objectives;
  - b. an Authorised Person's organisation and reporting structure for technology operations, including adequacy of senior management oversight; and
  - c. the appropriateness of the systems acquisition, development and maintenance activities, including the allocation of responsibilities between IT development and operational areas.

## **6.7 Information security**

### **6.7.1** An Authorised Person must establish and maintain appropriate systems and controls to manage its information security risk.

#### **Guidance**

In establishing its systems and controls to address information security risks, an Authorised Person should have regard to:

- a. confidentiality: information should be accessible only to Persons or systems with appropriate authority, which may require firewalls within a system, as well as entry restrictions;
- b. the risk of loss or theft of customer data;
- c. integrity: safeguarding the accuracy and completeness of information and its processing;

- d. non-repudiation and accountability: ensuring that the Person or system that processed the information cannot deny their actions; and
- e. internal security: including premises security, staff vetting; access rights and portable media, staff internet and email access, encryption, safe disposal of customer data, and training and awareness.

## **6.8 Outsourcing**

- 6.8.1** An Authorised Person must establish and maintain appropriate systems and controls to manage its outsourcing risk.

### **Guidance**

1. The GEN rules set out the Regulator requirements on outsourcing by Authorised Persons. This Section complements the requirements in the GEN rules and contains guidance on managing the Operational Risk associated with outsourcing arrangements.
2. The assessment of outsourcing risk at an Authorised Person may depend on several factors, including the scope and materiality of the outsourced activity, how well the Authorised Person manages, monitors and controls outsourcing risk (including its general management of Operational Risk), and how well the service provider manages and controls the potential risks of the operation.
3. Factors that an Authorised Person should consider in establishing outsourcing arrangements include the following:
  - a. the financial, reputational and operational impact on the Authorised Person of the failure of a service provider to perform adequately the activity;
  - b. potential losses to an Authorised Person's customers and counterparts in the event of a service provider failure;
  - c. the consequences of outsourcing the activity on the ability and capacity of the Authorised Person to conform with regulatory requirements and changes in such requirements;
  - d. the interrelationship of the outsourced activity with other activities within the Authorised Person;
  - e. the cost associated with the outsourcing;
  - f. any affiliation or other relationship between the Authorised Person and the service provider;
  - g. the regulatory status of the service provider;
  - h. the degree of difficulty and time required to select an alternative service provider or to bring the business activity in-house, if necessary;



- i. the complexity of the outsourcing arrangement. For example, the ability to control the risks where more than one service provider collaborates to deliver an end-to-end outsourcing solution; and
- j. any data protection, security and other risks which may be adversely affected by the geographical location of an outsourcing service provider. To this end, Specific Risk management expertise in assessing country risk related, for example, to political or legal conditions, could be required when entering into and managing outsourcing arrangements that are taken outside of the home country.

## **6.9 Business continuity and disaster recovery**

### **Guidance**

See GEN regarding requirements relating to an Authorised Person's business continuity and disaster recovery arrangements.

## **6.10 Management of Operational Risks in trading activities**

### **Guidance**

This Section complements the Rules and Guidance set out in other sections of this Chapter with more specific guidance for the identification, assessment, control and monitoring of Operational Risks in trading activities. In this Guidance, reference to "trading activities" should be construed in its natural sense in the context of Regulated Activities and should include an Authorised Person's activities in Dealing in Investments as Principal and Dealing in Investments as Agent. In addressing the Operational Risks arising from trading activities, an Authorised Person should consider the following:

- a. staff members in support and control functions, comprising functions such as operations, settlement, finance, risk management, legal, compliance, internal and external audit, should have adequate representation and authority within the Authorised Person's overall governance framework so as to be able to effectively challenge the activities undertaken by the front office;
- b. Operational Risk management systems should set criteria, indicators and thresholds enabling the identification of material incidents detected by internal control procedures. This should include tracking of Operational Risk losses in trading activities and analysis of those losses for possible interconnections (i.e. losses based on one event or root cause);
- c. high professional standards and a sound risk culture should be promoted within the Authorised Person, particularly in the front office, in a way that supports professional and responsible behaviour. This should include, but is not limited to, developing and implementing appropriate policies and procedures, setting standards (often in the form of a "code of conduct") for relations between traders and their counterparts, and training procedures;
- d. there should be adequate segregation of duties between front office and the support and controls functions in charge of supporting, verifying and monitoring trade transactions;

- e. appropriate policies and procedures relating to leave requirements and staff movements should be developed, implemented and regularly monitored; in particular:
  - i. procedures establishing a minimum absence requirement of at least two consecutive weeks' leave for traders (via a vacation, "desk holiday" or other absence from the office or trading) so that traders are physically unable to mark or value their own books, this responsibility being carried out by a different Person during those periods; and
  - ii. Employees changing job positions between front, middle and back offices or IT should be properly tracked.
- f. terms of reference describing the activity of each trader or group of traders should be established. Adherence to these terms should be subject to monitoring by support and control functions;
- g. documentation requirements for trading activities should be properly defined so as to minimise legal uncertainties in enforceability of contracts with clients and Counterparties. This should include consideration of using contracts that are standardised as far as possible, particularly in OTC transactions;
- h. all trading positions, profits and losses, cash flows and calculations associated with a transaction should be clearly recorded in the Authorised Person's management information systems with a documented audit trail. The audit trail should allow for the tracing of cash flows at a sufficiently granular level (e.g. traders, books, products and portfolios);
- i. appropriate procedures for confirmation of the terms and conditions of transactions with external Counterparties/clients should be established;
- j. appropriate processes and procedures should be implemented for the settlement of transactions. This should include consideration of the following elements:
  - i. the authorisation of inputs by the back office;
  - ii. payment/settlements carried out against independent documents;
  - iii. reconciliation between front office and back office systems; and
  - iv. reconciliation procedures independent of the processing functions.
- k. controls should include daily reconciliation of positions and cash flows across various internal systems and external parties. The reconciliations should include all events attached to the transactions including amendments, cancellation, exercises, resets and expiries;
- l. procedures and processes should be established to ensure accurate and timely monitoring and follow up of margin or Collateral calls;
- m. profit attribution is a key control for understanding the risk in a trading operation and therefore the control and support functions should have a good understanding of the various aspects that lead to P&L generation, particularly in relation to more complex products. Major implausibilities discovered within

the P&L in the context of the trading mandate and market developments should be further analysed to see if they are caused by Operational Risk events; and

- n. control procedures should be established to monitor and escalate unusual transactions, anomalies in confirmation and reconciliation processes, errors in recording, processing and settling transactions, along with cancellations, amendments, late trades and off-market rates.

## **6.11 Operational Risk Capital Requirement**

**6.11.1** This Section applies to an Authorised Person in Category 1, 2, 3A or 5.

**6.11.2** (1) An Authorised Person must, subject to (2), use the Basic Indicator Approach as prescribed in App7 to calculate its Operational Risk Capital Requirement.

(2) An Authorised Person may, with the written approval of the Regulator, use the Standardised Approach or the Alternative Standardised Approach, both as prescribed in App7, to calculate its Operational Risk Capital Requirement if the Regulator is satisfied that:

- (a) its Governing Body and senior management, as appropriate, are actively involved in the oversight of its Operational Risk framework;
- (b) it has, in accordance with the requirements set out in this Chapter, implemented and maintains an Operational Risk policy which provides for a sound and well-defined risk management framework to address the Authorised Person's Operational Risk; and
- (c) it has dedicated sufficient resources in the use of the relevant approach in its major business lines and its control and audit functions.

**6.11.3** An Authorised Person seeking to apply the Standardised Approach or the Alternative Standardised Approach must develop specific policies and have documented criteria for mapping gross income for current business lines and activities into the Standardised Approach or the Alternative Standardised Approach, as prescribed in App7. The criteria must be reviewed and adjusted for new or changing business activities as appropriate.

**6.11.4** Once an Authorised Person has obtained from the Regulator its written approval to apply the Standardised Approach or the Alternative Standardised Approach, the Authorised Person must not revert to the Basic Indicator Approach without prior written approval of the Regulator.

**6.11.5** (1) The Regulator may at any time by written notice require an Authorised Person to adopt a specified approach to calculating its Operational Risk Capital Requirement where the Regulator considers that this is:

- (a) appropriate given the nature, size, complexity and risk profile of the Authorised Person's business; or
- (b) necessary in the prevailing economic circumstances and it is in the interests of the ADGM.

(2) An Authorised Person must comply with a requirement made under (1).

**6.12 Professional indemnity insurance**

**6.12.1** This Section applies to an Authorised Person in Category 3B, 3C or 4.

**6.12.2** An Authorised Person must:

- (a) subject to Rule 6.12A, take out and maintain professional indemnity insurance cover appropriate to the nature, size, complexity and risk profile of the Authorised Person's business;
- (b) at least annually, provide the Regulator with a copy of the professional indemnity insurance cover in (a) covering the following 12 month period and be able to demonstrate its adequacy in relation to the nature, size, complexity and risk profile of the Authorised Person's business; and
- (c) notify the Regulator of any material changes to the cover in (a), including the level of cover, its renewal or termination.

**Guidance**

- 1. In complying with Rule 6.12.2, an Authorised Person should take out and maintain a contract for professional indemnity insurance (PII) from a reputable and well-capitalised Insurer and such contract should include cover in respect of claims for which the Authorised Person may be liable as a result of the conduct of itself and its Employees and appropriate cover in respect of legal costs arising from a claim.
- 2. Pursuant to Rule 6.4.1(c), an Authorised Person should notify the Regulator of any significant PII claim made. What amounts to a significant claim will depend on the nature size and complexity of the Authorised Person and the Regulator would expect the Authorised Person to treat a series of small single claims which are significant in aggregate as significant for the purposes of Rule 6.4.1(c).
- 3. An Authorised Person can fulfil the requirements under this Section by ensuring coverage of its activities under a group-wide PII policy, provided that policy covers the Authorised Person and its activities and that policy meets the conditions specified in this Section. Where the Authorised Person's group PII cover does not meet the requirements specified under this Section, the Authorised Person will be required to obtain PII cover that meets those requirements.

**6.12A Professional indemnity insurance for Third Party Providers****Minimum Coverage for Third Party Providers**

**6.12A.1** A Third Party Provider must maintain at all times a minimum professional indemnity insurance coverage of US\$150,000.

**Transaction Limits**

**6.12A.2** A Third Party Provider must ensure that its remaining professional indemnity insurance coverage is always greater than thirty times the average daily value of all Third Party Transactions in the past ninety calendar days.

**6.12A.3** The value of a Third Party Transaction must be calculated as:

- (a) where the Third Party Transaction leads to a Payment Transaction, the value of the Payment Transaction; or
- (b) US\$0.10.

**6.12A.4** A Third Party Provider must calculate the value of its remaining professional indemnity insurance coverage by subtracting the value of any unsettled claims made against its professional indemnity insurance from the total value of its professional indemnity insurance coverage.

**Guidance**

1. A Third Party Provider's risk profile is that of a financial services firm and not of a software development firm, notwithstanding that software is a key component of a Third Party Provider's business model.
2. Rule 6.12A.2 requires a Third Party Provider to maintain sufficient professional indemnity insurance coverage to reimburse Customers should operational risk events occur.
3. A Third Party Provider is expected to manage the size and volume of its Third Party Transactions within its remaining professional indemnity insurance cover. Such management could take place through imposing limits on the number or value of transactions.
4. A Third Party Provider should review the adequacy of its professional indemnity insurance cover periodically to determine whether, based on its projected number or value of transactions, it should increase the value of its professional indemnity insurance coverage.

## 7 INTEREST RATE RISK IN THE NON-TRADING BOOK

### Introduction

#### Guidance

1. This Chapter relates to interest rate risk in the Non-Trading Book. In relation to the Trading Book, an Interest Rate Risk Capital Requirement is imposed as a component of the Market Risk Capital Requirement under Chapter 5.
2. Non-Trading Book interest rate risk is normally a major source of risk for a bank or a firm that deals on its own account (including Underwriting on a firm commitment basis) and whose Non-Trading Book assets equal or exceed 15% of its total assets. Interest rate risk in the Non-Trading Book may arise from a number of possible sources, such as:
  - a. risks related to the 'mismatch' of repricing of assets and liabilities and off balance sheet short and long-term positions;
  - b. risks arising from hedging Exposure to one interest rate with Exposure to a rate which reprices under slightly different conditions;
  - c. risks related to the uncertainties of occurrence of transactions, for example, when expected future transactions do not equal the actual transactions; and
  - d. risks arising from consumers redeeming fixed rate products when market rates change.

### 7.1 Application

- 7.1.1 This Chapter applies to an Authorised Person in Category 1 or 2 on a solo basis.
- 7.1.2 Where an Authorised Person to which this Chapter applies is part of a Financial Group, this Chapter also applies on a consolidated basis in relation to all the entities within the Financial Group.

### 7.2 Stress testing for Non-Trading Book interest rate risk

- 7.2.1 An Authorised Person must carry out an evaluation of its Exposure to the interest rate risk arising from its Non-Trading Book activities. An Authorised Person with balance sheet positions in different currencies must measure its risk Exposures in each of the material currencies.
- 7.2.2
  - (1) The evaluation under Rule 7.2.1 must cover the effect of a sudden and unexpected parallel change in interest rates of 200 basis points in both directions.
  - (2) An Authorised Person must apply a 200 basis point shock to each material currency Exposure it faces as part of its Non-Trading Book.
- 7.2.3 An Authorised Person must immediately notify the Regulator if any evaluation under this Section suggests that, as a result of the change in interest rates described in Rule 7.2.2, the economic value of the firm would decline by more than 20% of its Capital Resources.

### **Guidance**

For the purposes of Rule 7.2.1, an Authorised Person should consider each currency accounting for 5% or more of its Non-Trading Book assets or Non-Trading Book liabilities as a material currency Exposure.

### **Frequency of stress testing**

- 7.2.4** An Authorised Person must carry out the evaluations required by Rule 7.2.1 as frequently as necessary for it to be reasonably satisfied that it has at all times a sufficient understanding of the degree to which it is exposed to the risks referred to in that Rule and the nature of that Exposure. In any case it must carry out those evaluations no less frequently than required by Rule 7.2.6.
- 7.2.5** In order to carry out effectively the stress testing requirements specified in Rule 7.2.2, an Authorised Person must include appropriate scenarios into its stress testing programmes for measuring its vulnerability to loss arising from the impact of adverse interest rate movements on its Non-Trading Book structure.
- 7.2.6**
- (1) Subject to (2), the minimum frequency of the evaluation referred to in Rule 7.2.1 is once each year.
  - (2) The minimum frequency of an evaluation of the effect of a sudden and unexpected parallel change in interest rates as referred to in Rule 7.2.2 is once each quarter.

### **Guidance**

For the purposes of Rule 7.2.6, an Authorised Person should consider the standards for stress testing recommended in the paper published by the BCBS – Principles for management and supervision of interest rate risk – in July 2004. In particular, an Authorised Person should include the technical specifications of a standardised interest rate shock detailed in Annex 3 of that paper as part of its systems for measurement of interest rate risk in the Non-Trading Book.

## **7.3 Non-Trading Book interest rate risk under Chapter 10**

- 7.3.1** In order to meet effectively the obligations specified under Chapter 10 of these Rules, which includes the need to address Non-Trading Book interest rate risk, an Authorised Person is required to make a written record of its assessments made under Rules specified in Chapter 10.

### **Guidance**

1. This Chapter 7 does not impose an explicit Capital Requirement relating to interest rate risk. Rather, the Regulator may impose an Individual Capital Requirement (ICR) under Chapter 10 where it is of the view that the Authorised Person's Capital Requirement is insufficient to address adequately all its risks, and in particular its Exposure to interest rate risk in the Non-Trading Book .
2. Sections 10.3 and 10.4 of Chapter 10 require an Authorised Person to submit IRAP and ICAAP assessments to the Regulator within four months of the end of the firm's financial year. The provisions also require the firm to ensure the assessments are documented in writing and to retain the records for at least six years.



3. An Authorised Person's record of its approach to evaluating and managing interest rate risk in its Non-Trading Book, as part of its ICAAP should cover the following issues:
  - a. the internal definition of, and boundary between, "Non-Trading Book" and "trading activities" in accordance with Chapter 2 and App2;
  - b. the definition of economic value and its consistency with the method used to value assets and liabilities (e.g. discounted cashflows);
  - c. the size and the form of the different shocks to be used for internal calculations;
  - d. the use of a dynamic and / or static approach in the application of interest rate shocks;
  - e. the treatment of commonly called "pipeline transactions" (including any related hedging);
  - f. the aggregation of multi-currency interest rate Exposures;
  - g. the inclusion (or not) of non-interest bearing assets and liabilities (including capital and reserves);
  - h. the treatment of current and savings accounts (i.e. the maturity attached to Exposures without a contractual maturity);
  - i. the treatment of fixed rate assets (liabilities) where customers still have a right to repay (withdraw) early;
  - j. the extent to which sensitivities to small shocks can be scaled up on a linear basis without material loss of accuracy (i.e. covering both convexity generally and the non-linearity of pay-off associated with explicit Option products);
  - k. the degree of granularity employed (for example, offsets within a time bucket); and
  - l. whether all future cash flows or only principal balances are included.

## **7.4 Systems and controls for Non-Trading Book interest rate risk**

### **Non-Trading Book interest rate risk policy**

- 7.4.1** (1) An Authorised Person must implement and maintain a policy which enables it to identify, assess, control and monitor its Non-Trading Book interest rate risk.
- (2) The policy must be documented and include an appropriate interest rate risk strategy as well as an enterprise-wide interest rate risk management framework appropriate to the nature, scale and complexity of its Non-Trading Book activities. The strategy and management framework must:
  - (a) enable the Governing Body and senior management of the Authorised Person to have an enterprise-wide view of interest rate risk as it applies to non-trading activities;

- (b) include a system for identifying and assessing Non-Trading Book interest rate risk and its sources;
  - (c) include a process for the measurement and monitoring of Non-Trading Book interest rate risk, using robust and consistent methods which enable the Authorised Person to implement the requirements set out in Rules 7.2.1 to 7.2.6; and
  - (d) include a system for controlling and managing Non-Trading Book interest rate risk which enables it to comply with the overall risk management standards expected of an Authorised Person and ensure continued compliance with these Rules.
- (3) An Authorised Person must identify the Non-Trading Book interest rate risk impact of any new product, activity or service that it proposes to start and ensure that such impacts are duly addressed with adequate controls before the new product or activity is undertaken or introduced.
- (4) An Authorised Person must:
- (a) ensure that its risk management systems enable it to implement the Non-Trading Book interest rate risk policy;
  - (b) identify, assess, mitigate, control and monitor the risk; and
  - (c) review and update the policy at intervals that are appropriate to the nature, scale and complexity of its activities.

### **Guidance**

1. The Regulator expects that an Authorised Person's strategy towards Non-Trading Book interest rate risk will set out the approach that the Authorised Person will take towards management of the risk, 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 Person's Non-Trading Book interest rate risk policy.
2. The Regulator expects that an Authorised Person's framework for managing Non-Trading Book interest rate risk will address the following:
  - a. the Non-Trading Book interest rate risk management framework should be integrated into the Authorised Person's enterprise-wide risk management framework, including but not limited to. integration with its daily risk management practices;
  - b. the output of the risk measurement system which forms part of the Non-Trading Book interest rate risk management framework should be used in reporting the level of that risk to the senior management and Governing Body of the Authorised Person;
  - c. the measurement system should be capable of measuring the risk under the earnings approach. Depending on the scale and complexity of Non-Trading Book structure, the Authorised Person may also need to measure the risk based on economic value approach;

- d. an Authorised Person's Non-Trading Book interest rate risk measurement system should be clearly defined and consistent with the nature and complexity of its balance sheet structure;
  - e. the processes, procedures and limits should be clearly documented and should reflect a consideration of the interest rate risk associated with the balance sheet structure of the Authorised Person, considering various asset and liability positions. These processes, procedures and limits should be reviewed and approved by appropriate levels of senior management;
  - f. the framework should involve an accurate, informative and timely management system for interest rate risk, which is essential to keep the senior management and the Governing Body of the Authorised Person adequately informed to enable them to ensure compliance with the Non-Trading Book interest rate risk policy of the Authorised Person; and
  - g. the Non-Trading Book interest rate risk framework should include measures to consider balancing cash flows and management of the risk's impact from new products or services through hedging using swaps or other Derivatives. Any such major hedging or risk management initiatives should be approved in advance by the Asset Liability Committee (ALCO) or the Governing Body of the Authorised Person.
3. The Non-Trading Book interest rate risk measurement systems referred to in Rule 7.4.1(2)(c) should encompass all material drivers of the risk. Such systems should evaluate the effect of rate changes on earnings or economic value meaningfully and accurately within the context and complexity of their activities. They should be able to flag any excessive Exposures. An effective risk measurement system should address the following:
  - a. evaluate all significant interest rate risk arising from the full range of an Authorised Person's assets, liabilities and off-balance sheet positions, both trading and non-trading;
  - b. ensure that an integrated view of interest rate risk across products and business lines is available to management, particularly when different measurement systems and methods are used across different business lines;
  - c. employ generally accepted financial models and ways of measuring risk; and
  - d. ensure accurate and timely data on all aspects related to current positions.
4. Authorised Persons should measure their vulnerability to loss in stressed market conditions, including the breakdown of key assumptions, and consider those results when establishing and reviewing their policies and limits for interest rate risk. Possible stress scenarios for this exercise should include:
  - a. historical scenarios;

- b. changes in the general level of interest rates, e.g. changes in yields of 200 basis points or more in one year;
  - c. changes in the relationships between key market rates (i.e. basis risk), e.g.
    - i. a surge in term and savings Deposit rates and benchmark rates but no change in the prime rate, and
    - ii. a drop in the prime rate but no change in term and savings Deposit rates and benchmark rates;
  - d. changes in interest rates in individual time bands to different relative levels (i.e. yield curve risk);
  - e. changes in the liquidity of key financial markets or changes in the volatility of market rates; and
  - f. changes in key business assumptions and parameters such as the correlation between two currencies. In particular, changes in assumptions used for illiquid instruments and instruments with uncertain contractual maturities help understanding of an Authorised Person's risk profile.
5. An Authorised Person should consider the standards for stress testing recommended in the paper published in July 2004 by the BCBS – Principles for management and supervision of interest rate risk – in developing the stress testing scenarios. In particular, an Authorised Person should include the technical specifications of a standardised interest rate shock detailed in Annex 3 of that paper.

### **Responsibilities of Governing Body**

- 7.4.2**
- (1) An Authorised Person must ensure that its Governing Body is responsible for monitoring the nature and level of Non-Trading Book interest rate risk assumed by the Authorised Person and the process used to manage that risk.
  - (2) Without limiting the operation of (1), the responsibilities of an Authorised Person's Governing Body in respect of the risk include:
    - (a) approving the Authorised Person's Non-Trading Book interest rate risk policy, including its strategy and management framework;
    - (b) establishing and maintaining a senior management structure for the management of the risk and for ensuring compliance with the Authorised Person's risk strategy;
    - (c) monitoring the Authorised Person's overall Non-Trading Book interest rate risk profile on a regular basis and being aware of any material changes in the Authorised Person's current or prospective profile; and
    - (d) ensuring that Non-Trading Book interest rate risk is adequately identified, assessed, mitigated, controlled and monitored.

**Guidance**

1. The Governing Body of the Authorised Person may delegate responsibility for establishing Non-Trading Book interest rate risk policies and strategies to the Asset and Liability Committee (ALCO) or an equivalent committee, which is the designated senior management committee for managing balance sheet structure and interest rate risk associated with it.
2. An Authorised Person involved in banking activities or complex principal dealing activities should have a designated committee for design and implementation of Non-Trading Book interest rate risk management.
3. An Authorised Person should establish and enforce operating limits and other practices that maintain Exposures within levels consistent with their internal policies and that accord with their approach to measuring the risk. In particular, Authorised Persons should set a limit on the extent to which floating rate Exposures are funded by fixed rate sources and vice versa to limit the risk. In floating rate lending, Authorised Persons should limit the extent to which they run any basis risk that may arise if lending and funding are not based on precisely the same market interest rate.

## **8 GROUP RISK**

### **Introduction**

#### **Guidance**

1. This Chapter deals with management of Group Risk Exposure of an Authorised Person. Group Risk refers to the risk of potential losses incurred by an Authorised Person on account of its relationship with other members of its Financial Group, if it were to be part of one.
2. This Chapter includes requirements that an Authorised Person implement:
  - a. an effective management framework for Group Risk Exposure;
  - b. a specified methodology for the calculation of Financial Group Capital Resources and Financial Group Capital Requirements.
3. This Chapter also includes requirements limiting Financial Group Exposures and restrictions on the ownership or control of Deposit-taking firms.

### **8.1 Application**

- 8.1.1** (1) This Section and Section 8.5 apply to an Authorised Person in any Category.
- (2) Sections 8.2 to 8.4 apply only to an Authorised Person in Category 1, 2 or 5.

#### **Guidance**

1. Group membership may be a source of both strength and weakness to an Authorised Person. The purpose of Group Risk requirements is to ensure that an Authorised Person takes proper account of the risks related to the Authorised Person's membership of a Group. The Group Risk requirements form a key part of the Regulator's overall approach to prudential supervision.
2. Section 8.5 imposes important restrictions on the ability of Authorised Persons in Category 3A, 3B, 3C or 4, and Financial Institutions which are not regulated in ADGM, to be a Parent of an Authorised Person in Category 1 or 5, or of a firm carrying on similar activities outside of the ADGM.

### **Requirements by the Regulator**

- 8.1.2** Upon notice to an Authorised Person from the Regulator, the Regulator will be the consolidated supervisor of a Financial Group to which an Authorised Person belongs. The Regulator may require an Authorised Person forming part of a Financial Group to comply with requirements under PRU on a consolidated basis.
- 8.1.3** (1) The Regulator may require an Authorised Person to:
- (a) form a Financial Group with any other entity within its Group; or
  - (b) include within its Financial Group any other entity within its Group;
- where the Regulator considers it necessary or desirable to do so in the interests of effective supervision of the Authorised Person.

- (2) An Authorised Person 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 Person has obtained the Regulator's prior written approval.
- (3) An Authorised Person must provide to the Regulator, if requested, any of the following information in relation to its Group or Financial Group:
  - (a) details as to the entities within the Group or Financial Group;
  - (b) the structure of the Group or Financial Group; and
  - (c) the systems and controls in place to manage Group Risk.

### **Guidance**

1. 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 or Financial Group, one or more of those Authorised Persons may make application to the Regulator for an appropriate waiver or modification.
2. For the purposes of Rule 8.1.3, the Regulator would consider a range of factors when requiring an Authorised Person to form a Financial Group. These factors would include regulatory risk factors, including but not limited to, (direct and indirect) participation, influence or contractual obligations, interconnectedness, intra Group Exposures, intra Group services, regulatory status and legal framework.

## **8.2 Systems and controls requirements**

### **8.2.1** An Authorised Person in Category 1, 2 or 5 that is a member of a Group must establish and maintain systems and controls for the purpose of:

- (a) monitoring the effect on the Authorised Person 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 Person may take into account its position within its Group. For instance, it would be reasonable for a small Authorised Person within a larger Group to place some reliance on its Parent to ensure that appropriate systems and controls are in place.



- 8.2.2** (1) An Authorised Person must have systems and controls to enable it to determine and monitor:
- (a) its Financial Group Capital Requirement; and
  - (b) whether the amount of its Financial Group Capital Resources is, and is likely to remain, greater than the amount of its Financial Group Capital Requirement.
- (2) Such systems and controls must include an analysis of:
- (a) realistic scenarios which are relevant to the circumstances of the Financial Group; and
  - (b) the effects on the Financial Group Capital Requirement and on the Financial Group Capital Resources if those scenarios occurred.

### **8.3 Financial Group Capital Requirements and Financial Group Capital Resources**

#### **Guidance**

By Rule 8.1.1(2), this Section applies to an Authorised Person in Category 1, 2 or 5.

- 8.3.1** (1) The other Rules in Section 8.3 do not apply to an Authorised Person if:
- (a) the Authorised Person's Financial Group is already the subject of Financial Group prudential supervision by the Regulator as a result of the authorisation of another Financial Group member;
  - (b) the Regulator has confirmed in writing, in response to an application from the Authorised Person, that it is satisfied that the Authorised Person's Group is the subject of consolidated prudential supervision by an appropriate regulator; or
  - (c) except where the Regulator has directed the inclusion of an entity pursuant to Rule 8.1.3, the percentage of total assets of Authorised Persons and Financial Institutions in the Financial Group is less than 40% of the total Financial Group assets.
- (2) If an Authorised Person receives confirmation in writing from the Regulator in accordance with (1)(b), it must immediately advise the Regulator in writing if the circumstances upon which the confirmation was based change.
- 8.3.2** An Authorised Person must ensure at all times that its Financial Group Capital Resources, as calculated in Rule 8.3.4, are equal to or in excess of its Financial Group Capital Requirement as calculated in Rule 8.3.3.

#### **Guidance**

If an Authorised Person breaches Rule 8.3.2, the Regulator will take into account the full circumstances of the case, including any remedial steps taken by another regulator or the Authorised Person, in determining what enforcement action, if any, it will take.

### **Financial Group Capital Requirement**

- 8.3.3** (1) An Authorised Person in Category 1, 2 or 5 must calculate its Financial Group Capital Requirement by applying the accounting consolidation method, which calculates the Capital Requirement of the Financial Group based on the Financial Group's consolidated financial statements, and using applicable prudential Rules as set out in these Rules.
- (2) For the purposes of this Rule, the consolidated financial statements of the Financial Group must be prepared in accordance with International Financial Reporting Standards.

### **Financial Group Capital Resources**

- 8.3.4** (1) An Authorised Person in Category 1, 2 or 5 must calculate its Financial Group Capital Resources by applying either of the following methods, excluding those amounts referred to in Rule 8.3.5:
- (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 (2), the Capital Resources of any Authorised Persons and Financial Institutions included in the Financial Group; and
    - (iii) the Financial Group's proportionate share of Capital Resources in Financial Institutions not included in the Financial Group in which any member of the Financial Group has a participation.
- (2) For the purposes of (1)(b)(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 the provisions in Part 4 of Chapter 3.

- 8.3.5** When calculating the Financial Group Capital Resources of a Financial Group, an Authorised Person 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 8.3.3; and
  - (b) are not freely transferable within the Financial Group.

## **Guidance**

1. Because the Financial Group Capital Requirement set out in Rule 8.3.3 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.

**8.3.6** Deductions for Qualifying Holdings under Section 3.14 may be calculated based on the Group's total T1 and T2 Capital.

## **8.4 Financial Group Large Exposure limits**

**8.4.1** Subject to IFR Rule 5.4.15, an Authorised Person in Category 1, 2 or 5 must not incur any Financial Group Large Exposure, including the Financial Group's PSIAus, that exceeds 25% of its Group's Tier 1.

**8.4.2** An Authorised Person in Category 1, 2 or 5 must ensure that the sum of its Financial Group Large Exposures, including the Financial Group's PSIAus, to a Counterparty or group of Closely Related Counterparties does not exceed 800% of its Financial Group's Tier 1.

## **8.5 Restrictions on ownership or control**

### **Guidance**

By Rule 8.1.1(1), this Section applies to an Authorised Person in any Category.

### **Parents of Category 1 and 5 Authorised Persons**

- 8.5.1**
- (1) No entity other than one of the following may be the Parent of, or any of the Parents of, an Authorised Person in Category 1 or 5:
    - (a) another Authorised Person in Category 1 or 5; or
    - (b) an Authorised Person with a Financial Services Permission to carry on the activities of Accepting Deposits.
  - (2) An entity other than one referred to in (1)(a) or (b) may be the Parent of an Authorised Person in Category 1 or 5 where the ultimate, or any intermediate, Parent is an Authorised Person of the type specified under 1(a) or (b).

**Restrictions on Category 3A, 3B, 3C and 4 Authorised Persons**

- 8.5.2** (1) An Authorised Person in Category 3A, 3B, 3C or 4 must not, subject to (2), be a Parent of an entity that:
- (a) is an Authorised Person in Category 1 or 5 or an Insurer; or
  - (b) carries on activities that would, if conducted in the ADGM, constitute Accepting Deposits or Managing a Profit Sharing Investment Account which is a PSIAu.
- (2) An Authorised Person in Category 3A, 3B, 3C or 4 may own or control an entity referred to in (1) where it is itself a Subsidiary of:
- (a) a Financial Institution with a Financial Services Permission to carry on any one or more of the activities specified in (1)(b); or
  - (b) an Authorised Person in Category 1 or 5 or an Insurer.

## **9 LIQUIDITY RISK**

### **Introduction**

#### **Guidance**

1. This Chapter deals with management of Liquidity Risk by an Authorised Person. Liquidity Risk refers to the risk of potential losses incurred by an Authorised Person's failure to have liquid assets to ensure payment of all its liabilities as they fall due and be in a position to meet all payments required to sustain its business on a planned growth path.
2. This Chapter requires an Authorised Person to:
  - a. implement Liquidity Risk management systems and controls;
  - b. identify, measure and monitor Liquidity Risk;
  - c. maintain a minimum level of HQLA; and
  - d. determine quantitative limits on cumulative negative Maturity Mismatch in accordance with a specified methodology.

### **9.1 Application**

- 9.1.1**
- (1) This Chapter applies to an Authorised Person in Category 1, 2, 3A or 5.
  - (2) Rule 9.2.2(3) only applies to an Authorised Person in Category 2 or an Authorised Person that is a Domestic Firm in Category 3A.
  - (3) Rules 9.3.12 and 9.3.13 only apply to Domestic Firms.

#### **Guidance**

1. In accordance with Rule 3.2.2 or Rule 3.2.4, an Authorised Person 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 Person 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.
2. In 1.b., "future profile of cashflows" refers to the pattern of cashflows including, for example, in the terms of source, maturity date, amounts and nature of cashflows.

### **9.2 Liquidity Risk policy systems and controls**

- 9.2.1**
- (1) An Authorised Person must establish and maintain a Liquidity Risk policy which is in writing and is approved at least annually by its Governing Body.

- (2) The policy must set out the level of Liquidity Risk the Authorised Person is willing to tolerate 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 and the strategy must include the matters referred to in (3), (4), and (5).
- (3) The strategy must include a system for identifying and assessing Liquidity Risk in accordance with Rule 9.2.4.
- (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 Person to implement the requirements set out in Rule 9.2.5.
- (5) The strategy must include a system for controlling Liquidity Risk which enables the Authorised Person to implement the requirements set out in Rule 9.2.6.
- (6) An Authorised Person must ensure that it has risk management systems to implement the policy.

### **Guidance**

1. The Regulator expects that an Authorised Person's Liquidity Risk strategy will set out the approach that the Authorised Person 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 Person's Liquidity Risk policy.
2. The Regulator expects that an Authorised Person's strategy for managing Liquidity Risk will take into account the need to:
  - a. develop a liquidity management strategy, policies and processes in accordance with the Authorised Person's stated Liquidity Risk tolerance;
  - b. ensure that the Authorised Person maintains sufficient liquidity at all times;
  - c. determine the structure, responsibilities and controls for managing Liquidity Risk and for overseeing the liquidity positions of all branches and subsidiaries in the jurisdictions in which the Authorised Person is active, and outline these elements clearly in the Authorised Person's liquidity policies;
  - d. have in place adequate internal controls to ensure the integrity of its Liquidity Risk management processes;
  - e. ensure that stress tests, contingency funding plans and holdings of HQLA are effective and appropriate for the Authorised Person;
  - f. establish a set of reporting criteria, specifying the scope, manner and frequency of reporting to various recipients (such as the Governing Body, senior management and the Asset and Liability Committee (ALCO)) and who is responsible for preparing the reports;

- g. establish the specific procedures and approvals necessary for exceptions to policies and limits, including the escalation procedures and follow-up actions to be taken for breaches of limits;
- h. monitor closely current trends and potential market developments that may present significant, unprecedented and complex challenges for managing Liquidity Risk so that appropriate and prompt changes to the liquidity management strategy can be made as needed; and
- i. continuously review information on the Authorised Person's liquidity developments and report regularly to the Governing Body.

- 9.2.2**
- (1) An Authorised Person must ensure that its Governing Body is responsible for monitoring the nature and level of Liquidity Risk assumed by the Authorised Person and the process used to manage that risk.
  - (2) Without limiting the operation of (1), the responsibilities of an Authorised Person's Governing Body in respect of Liquidity Risk include:
    - (a) approving the statement of the Authorised Person's Liquidity Risk strategy;
    - (b) establishing and maintaining a senior management structure with clearly defined responsibilities and roles for the management of Liquidity Risk and for ensuring compliance with the Authorised Person's Risk strategy;
    - (c) ensuring the senior management in (b) and other relevant personnel have the necessary experience to manage Liquidity Risk;
    - (d) monitoring the Authorised Person's overall Liquidity Risk profile on a regular basis and being aware of any material changes in the Authorised Person's current or prospective Liquidity Risk profile;
    - (e) ensuring that Liquidity Risk is adequately identified, assessed, mitigated, controlled and monitored in accordance with the Authorised Person's Liquidity Risk tolerance and strategy;
    - (f) ensuring that the Liquidity Risk tolerance and strategy is documented; and
    - (g) ensuring that the Liquidity Risk tolerance and strategy is reviewed at least annually.

### **Requirements imposed on an Authorised Person in Category 2 or 3A**

- (3) An Authorised Person in Category 2 or an Authorised Person that is a Domestic Firm in Category 3A 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 Person's overall Liquidity Risk profile on a regular basis.

### **Guidance**

In respect of Rule 9.2.2(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 Person'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 Person's Liquidity Risk; and
- d. oversee the establishment of effective internal controls over the Liquidity Risk management process.

- 9.2.3** (1) An Authorised Person 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 Person:
    - (i) has formally approved the delegation;
    - (ii) keeps the delegation under review; and
  - (b) the Authorised Person notifies the Regulator in writing of the delegation immediately upon its being made.
- (2) If an Authorised Person delegates the management of its Liquidity Risk in accordance with (1), the requirements in this Chapter continue to apply to the Authorised Person.

### **Guidance**

If Liquidity Risk management is delegated as set out in Rule 9.2.3, responsibility for its effectiveness remains with the Authorised Person's Governing Body.

### **Identifying Liquidity Risk**

- 9.2.4** (1) An Authorised Person 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.
- (2) An Authorised Person must assess the extent to which committed facilities can be relied upon under stressed conditions identified in accordance with Rule 9.2.9.

- (3) An Authorised Person must consider potential liability concentrations when determining the appropriate mix of liabilities.
- (4) An Authorised Person 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 Person 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 Person in stressed conditions.

**Guidance**

- 1. As part of the assessment for the purposes of Rule 9.2.4(1), an Authorised Person should identify significant concentrations within its asset portfolio.
- 2. For the purposes of Rule 9.2.4(3), an Authorised Person 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 Person 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**

- 9.2.5** (1) An Authorised Person must ensure that the method referred to in Rule 9.2.1(4) for measuring Liquidity Risk is capable of:
- (a) measuring the extent of the Liquidity Risk it is incurring and includes early warning indicators to aid its daily liquidity risk measurement and management processes;
  - (b) dealing with the dynamic aspects of the Authorised Person's liquidity profile;
  - (c) where appropriate, measuring the Authorised Person's Exposure to Foreign Currency Liquidity Risk;
  - (d) where appropriate, measuring the Authorised Person's intra-day liquidity positions; and
  - (e) where appropriate, measuring the Authorised Person's Exposure to PSIA and Islamic Contract Liquidity Risk.
- (2) An Authorised Person 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 Person.

**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 Person's reputation in the market and the condition of the market itself.
2. Where an Authorised Person 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**

- 9.2.6** An Authorised Person must ensure that the system referred to in Rule 9.2.1(5):

- (a) enables the Authorised Person's Governing Body and senior management to review compliance with limits set in accordance with Rule 9.2.7 and operating procedures; and
  - (b) has appropriate approval processes, limits and other mechanisms designed to provide reasonable assurance that the Authorised Person's Liquidity Risk management processes are adhered to.
- 9.2.7**
  - (1) An Authorised Person must ensure that its Governing Body sets appropriate liquidity limits covering Liquidity Risk management in both day-to-day and stressed conditions.
  - (2) An Authorised Person must periodically review and, where appropriate, adjust the limits referred to in (1) when its Liquidity Risk policy changes.
  - (3) An Authorised Person must promptly resolve any policy or limit exceptions according to the processes described in its Liquidity Risk policy.
- 9.2.8** An Authorised Person must assess market access under a variety of normal and stressed conditions.
- 9.2.9**
  - (1) An Authorised Person 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 Person must:
    - (a) use scenarios based on varying degrees of stress and both Authorised Person-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 Person's funding needs and sources.
  - (3) An Authorised Person 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 9.2.9(2)(b) should take into account:
  - a. possible changes in the market's perception of the Authorised Person and the effects that this might have on the Authorised Person's access to the markets, including:
    - i. where the Authorised Person funds its holdings of assets in one currency with liabilities in another, access to foreign exchange markets, particularly in less frequently traded currencies;
    - ii. access to secured funding, including by way of repurchase agreement transactions; and

- iii. the extent to which the Authorised Person 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 Person under off-balance sheet instruments to which the Authorised Person 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 Person has a connection may be triggered; and
  - iv. its ability to securitise assets may be reduced.

**9.2.10** (1) An Authorised Person must have a documented contingency funding plan to ensure that, for each of the tested scenarios, the Authorised Person 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 Person 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 Person 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 Person'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.

### **9.3 Liquidity requirements**

**9.3.1** This Section applies to an Authorised Person in Category 1 or 5.

#### **Global liquidity concession**

- 9.3.2**
- (1) An Authorised Person which carries on business in the ADGM through a Branch may apply to the Regulator for a global liquidity concession.
  - (2) An application for a global liquidity concession must be made in accordance with the requirements in section A10.1 of App10.
  - (3) If the Regulator grants a global liquidity concession to an Authorised Person, that Authorised Person need not comply with the quantitative liquidity requirements of this Section.
  - (4) The Regulator may specify the period for which a global liquidity concession is valid.

#### **Guidance**

Section A10.1 in App10 provides guidance in respect of the type of information upon which the Regulator will base its assessment of an application for a global liquidity concession.

#### **HQLA requirement**

**9.3.3** An Authorised Person must at all times maintain an adequate level of HQLA to meet its liquidity needs for a minimum 30 calendar day period under a severe stress scenario.

Rules A10.2.2 to A10.2.9 in App10 set out the conditions for assets to be treated as HQLA.

#### **Liquidity Coverage Ratio**

**9.3.4** An Authorised Person must, except as provided in Rule 9.3.7, maintain an LCR of at least 100%.

#### **Guidance**

Rule 9.3.4 sets a minimum level and is not intended to limit the generality of the requirement in Rule 9.3.3.

**9.3.5** An Authorised Person must calculate its LCR using the following formula and in accordance with the Rules in section A10.2 of App10.

LCR = Value of stock of HQLA / Total Net Cash Outflows over the next 30 calendar days.

### **Guidance**

1. Section A10.2 of App10 sets out how the value of stock of HQLA and Total Net Cash Outflows are to be calculated.
2. An Authorised Person active in multiple currencies should:
  - a. maintain HQLA consistent with the distribution of its liquidity needs by currency;
  - b. assess its aggregate foreign currency liquidity needs and determine an acceptable level of currency mismatches; and
  - c. undertake a separate analysis of its strategy for each currency in which it has material activities, considering potential constraints in times of stress.

- 9.3.6** (1) The Regulator may by written notice to an Authorised Person in relation to the LCR Requirement applying to it:
- (a) adjust the LCR Requirement;
  - (b) adjust requirements under section A10.2 of App10 for calculating its stock of HQLA or the Total Net Cash Outflows;
  - (c) alter the calculation methodologies or parameters for the purposes of the LCR Requirement;
  - (d) disapply the LCR Requirement; or
  - (e) impose additional requirements based on its assessment of the Liquidity Risk Exposure of that Authorised Person.
- (2) If the Regulator amends a requirement under (1)(a), (b), (c) or (e), the Authorised Person must comply with the requirement as amended. If the Regulator disapplies a requirement under (1)(d), the Authorised Person need not comply with that requirement.

### **Liquid assets buffer**

- 9.3.7** (1) An Authorised Person must, except as provided under Rule 9.3.8, maintain a buffer of HQLA over the minimum level of LCR required under its LCR Requirement, appropriate to the nature, scale and complexity of its operations and in line with its Liquidity Risk tolerance.
- (2) The Regulator may require an Authorised Person to maintain an additional buffer of liquid assets in cases where the Regulator assesses that the Authorised Person has failed to carry out stress tests effectively.

### **Guidance**

An Authorised Person should conduct its own stress tests to assess the level of liquidity it should hold beyond the minimum required under this section, and construct its own scenarios that could cause difficulties for its specific business activities. Such internal stress tests should incorporate longer periods than the one



required under this section. Authorised Persons are expected to share the results of these additional stress tests with the Regulator.

### **Liquidation of assets during periods of stress**

- 9.3.8** During a period of financial or liquidity stress, an Authorised Person may liquidate part of its stock of HQLA and use the cash generated to cover cash outflows. Subject to Rule 9.3.9, the Authorised Person's level of HQLA may fall below the levels required under its LCR Requirement to the extent necessary to deal with cash outflows during that period.

### **Notification if LCR Requirement is not met**

- 9.3.9** An Authorised Person must notify the Regulator in writing immediately if it does not meet, or becomes aware of circumstances that may result in it not meeting, at any time, its LCR Requirement (including during a period of stress referred to in Rule 9.3.8).

### **Guidance**

1. An Authorised Person should in its notification clearly explain:
  - a. the reasons for not meeting the LCR Requirement;
  - b. measures that have been taken and will be taken to ensure it reverts to meeting its LCR Requirement as soon as possible; and
  - c. its expectations regarding the potential duration of the situation.
2. An Authorised Person that makes a notification should discuss with the Regulator what, if any, further steps it should take to deal with the situation.

### **The Liquidity Mismatch Approach**

### **Guidance**

The Liquidity Mismatch Approach measures an Authorised Person's short-term liquidity by assessing the maturity mismatch between its inflows (assets) and outflows (liabilities) over an eight-day time horizon.

- 9.3.10** (1) An Authorised Person in Category 1 or 5 must use the Liquidity Mismatch Approach, as set out in this Section, to measure its short-term liquidity.
- (2) When using the Liquidity Mismatch Approach, an Authorised Person must determine the net cumulative maturity mismatch position for the time band from sight to eight days by:
- (a) determining, in accordance with the Rules in Sections A10.2 and A10.3, the inflows (assets) and outflows (liabilities) in that time band; and
  - (b) subtracting outflows (liabilities) from inflows (assets) in that time band.

### Measuring liquidity for Category 1 and Category 5

- 9.3.11** (1) An Authorised Person in Category 1 or 5 must determine a net cumulative maturity mismatch position for the sight-eight day time band in respect of each of the following means of funding used by the Authorised Person:
- (a) PSIAus; and
  - (b) Deposits.
- (2) An Authorised Person in Category 1 or 5 must calculate its short-term liquidity by using the net cumulative maturity mismatch position separately for each means of funding used by the Authorised Person as a percentage of the means of funding in the sight-eight day time band as follows:
- (a) PSIAus net cumulative maturity mismatch % =
 
$$\frac{\text{Net cumulative maturity mismatch} \times 100}{\text{Total PSIAus}}$$
  - (b) Total Deposit liabilities net cumulative maturity mismatch % =
 
$$\frac{\text{Net cumulative maturity mismatch} \times 100}{\text{Total Deposits}}$$
- (3) If an Authorised Person exceeds a net cumulative maturity mismatch limit of -15% in respect of any of the means of funding it must immediately inform the Regulator in writing and clearly explain what steps it will take to bring its liquidity position back within the limit.

### Net Stable Funding Ratio - NSFR

- 9.3.12** An Authorised Person must maintain an NSFR of at least 100% at all times, calculated using the following formula.

$$\text{NSFR} = \text{Available Stable Funding} / \text{Required Stable Funding}$$

### Guidance

1. The NSFR complements the LCR and is designed to enable Authorised Persons to maintain a stable funding profile over a longer time horizon than that associated with the LCR. It is based on assigning factors to the liabilities and capital instruments of an Authorised Person that reflect their stability, and to the assets and off-balance sheet items of that Authorised Person that reflect their liquidity.
  2. Section A10.4 of App10 sets out how the amounts of Available Stable Funding and Required Stable Funding are to be calculated.
- 9.3.13** An Authorised Person must notify the Regulator immediately and confirm in writing if its NSFR falls below 100% or if it believes that is likely to happen.

## **10 SUPERVISORY REVIEW AND EVALUATION PROCESS**

### **Introduction**

#### **Guidance**

1. This Chapter deals with the regulatory requirements arising out of the need for Authorised Persons to carry out a self-assessment of their risk which can be reviewed and assessed by the Regulator. This Chapter details the Rules stipulating the need to complete internal risk assessments by Authorised Persons in defined frequencies and the Regulator's role in reviewing the results of such assessments. In the case of Authorised Persons facing financial risks, the requirements in this Chapter mandate completion of an Internal Capital Adequacy Assessment Process. The Regulator will review the results of such internal risk assessments. This Chapter also sets out how the Regulator may impose an additional Capital Requirement on a firm-specific basis in addition to the minimum requirement specified in Chapter 3 of these Rules to address higher-than-normal risk.
2. App11 provides detailed guidance on the various components of the Supervisory Review and Evaluation Process and explains the role of the different parties in completing the required processes.

### **10.1 Application**

**10.1.1** This Chapter applies to an Authorised Person in Category 1, 2, 3A, 3B, 3C or 5 as follows:

- (a) Sections 10.1, 10.2, 10.3 and 10.5 apply only to an Authorised Person in Category 1, 2, 3A, 3B, 3C or 5; and
- (b) Sections 10.4 and 10.6 apply only to an Authorised Person in Category 1, 2, 3A or 5.

**10.1.2** Where an Authorised Person to which this Chapter applies is part of a Financial Group, this Chapter applies on a consolidated basis in relation to all the entities within the Financial Group.

**10.1.3** In implementing the requirements prescribed in this Chapter, an Authorised Person must give due and appropriate regard to the provisions in App11.

#### **Guidance**

If an Authorised Person is part of a Financial Group which is already subject to requirements similar to those prescribed in this Chapter, the Regulator may consider a request for a waiver or modification in relation to the requirements of this Chapter.

### **10.2 Overview**

#### **Guidance**

1. These Rules are designed to implement key aspects of Pillar 2 of the revised framework of capital adequacy, commonly known as Basel III, published by the BCBS.

### **Internal Risk Assessment Process (IRAP)**

2. An Authorised Person in Category 1, 2, 3A, 3B, 3C or 5 is required to carry out an IRAP as detailed in Section 10.3, which is proportionate to the nature, size and complexity of its business activities and risk profile. An IRAP is a comprehensive internal risk evaluation as detailed in Section 10.3. More detail on the establishment of an IRAP and the manner of carrying out an IRAP assessment is provided in App11.

### **Internal Capital Adequacy Assessment Process (ICAAP)**

3. An Authorised Person in Category 1, 2, 3A or 5 is also required to carry out an ICAAP as detailed in Section 10.4, which is proportionate to the nature, size and complexity of its business activities and risk profile. This process enables such an Authorised Person to determine and maintain an adequate amount and quality of Capital Resources, relative to its risk profile. More detail on the establishment of an ICAAP and the manner of carrying out an ICAAP assessment is provided in App11.

### **Supervisory Review and Evaluation Process (SREP)**

4. The documented results of IRAP and ICAAP assessments are required to be submitted to the Regulator. The Regulator then applies a process known as the SREP as detailed in Section 10.5. As part of the SREP, the Regulator will evaluate the quality, completeness and consistency of the IRAP and, where applicable, the ICAAP of the Authorised Person, to form a view on the overall risk profile of the firm and whether the capital held by the firm is sufficient to deal with the risks. More detail concerning the SREP is provided in App11.
5. Following review of the IRAP and ICAAP of an Authorised Person, the Regulator may engage in a dialogue with the firm to evaluate the assessment of risks and where relevant, additional capital which the Regulator considers that the firm should hold resulting from the IRAP, ICAAP or SREP.

### **Individual Capital Requirement (ICR)**

6. Upon completing the SREP, the Regulator may impose an Individual Capital Requirement on an Authorised Person in Category 1, 2, 3A or 5 as detailed in Section 10.6. The ICR may be imposed where the Regulator concludes that the firm should hold more capital to provide for its overall risks.

## **10.3 IRAP**

**10.3.1** This Section applies to an Authorised Person in Category 1, 2, 3A, 3B, 3C or 5.

- 10.3.2**
- (1) An Authorised Person must establish and maintain an IRAP which details the processes and procedures by which the firm will identify, assess, aggregate and monitor the risks faced by it.
  - (2) The firm must conduct the IRAP assessment at least annually giving due regard to the Guidance in Section A11.1 of App11.
  - (3) The IRAP assessment conducted by the firm pursuant to (2) must be approved by its Governing Body and then submitted to the Regulator within four months from the end of the firm's financial year.

- (4) In addition to (2), the firm must conduct an IRAP assessment:
  - (a) whenever there is material change to the business, strategy, nature or scale of the activities of the firm which may have a significant impact on its risk profile or adequacy of its Capital Resources or Adjusted Capital Resources, as applicable; or
  - (b) as and when required by the Regulator.
- (5) An IRAP assessment conducted by the firm pursuant to (4) must be approved by its Governing Body and then submitted to the Regulator within two months, or such other period as may be specified by the Regulator, from the date of such material change or requirement.

**10.3.3** The results of an IRAP assessment must be documented by the Authorised Person in writing and include details of:

- (a) the risks identified;
- (b) the firm's strategies and plans to deal with those risks;
- (c) the firm's assessment of the adequacy of its Capital Requirement as calculated under these Rules to address all the risks identified by its IRAP;
- (d) the details of any stress testing and scenario analysis carried out and the resultant impact on the Capital Requirement; and
- (e) any other relevant information, giving due regard to the Guidance in App11.

**10.3.4** An Authorised Person must retain the records of an IRAP assessment for at least six years.

## **10.4 ICAAP**

**10.4.1** This Section applies to an Authorised Person in Category 1, 2, 3A or 5.

- 10.4.2**
- (1) An Authorised Person must implement and maintain an ICAAP which details the processes and procedures by which the firm will assess and maintain adequate Capital Resources in relation to the risks faced by it.
  - (2) The firm must conduct an ICAAP assessment at least annually giving due regard to the Guidance in Section A11.2 of App11.
  - (3) The ICAAP assessment conducted by the firm pursuant to (2) must be approved by its Governing Body and then submitted to the Regulator within four months from the end of the firm's financial year.
  - (4) In addition to (2), the firm must conduct an ICAAP assessment:
    - (a) whenever there is material change to the business, strategy, nature or scale of the activities of the firm which may have a significant impact on its risk profile or adequacy of its Capital Resources or Adjusted Capital Resources, as applicable; or
    - (b) as and when required by the Regulator.

- (5) The ICAAP assessment conducted by the firm pursuant to (4) must be approved by its Governing Body and then submitted to the Regulator within two months from the date of such material change or requirement.

**10.4.3** An Authorised Person must ensure that an ICAAP assessment is documented in writing and includes details of:

- (a) the calculations and models used in the determination of the level of Capital Requirements which it considers will be adequate to cover all the risks identified by its ICAAP assessment;
- (b) the firm's strategies and plans to ensure availability of the level of capital determined by the ICAAP;
- (c) specifications of any models used in the ICAAP, including the underlying assumptions, parameters, and results of back-testing; and
- (d) any other relevant information, giving due and appropriate regard to the Guidance in App11.

**10.4.4** An Authorised Person must retain the records of an ICAAP assessment for at least six years.

## **10.5 SREP**

### **Guidance**

1. The Regulator may conduct a SREP to review and evaluate the assessments carried out by an Authorised Person under its IRAP (relevant to firms in Categories 1, 2, 3A, 3B, 3C and 5) and ICAAP (relevant to firms in Categories 1, 2, 3A and 5). Section A11.3 of App11 contains guidance in relation to a SREP.
2. The Regulator may engage with a firm in Categories 1, 2, 3A and 5 in a dialogue where, following an SREP, the Regulator considers that it is or may be appropriate to impose an Individual Capital Requirement on the firm.
3. It is important that a firm cooperates in an open and co-operative manner with the Regulator in the course of its conduct of the dialogue.

## **10.6 Imposition of an Individual Capital Requirement**

- 10.6.1**
- (1) This Section applies to an Authorised Person in Category 1, 2, 3A or 5.
  - (2) The Regulator may, subject to (3) and (4), at any time by written notice to an Authorised Person:
    - (a) impose an Individual Capital Requirement; or
    - (b) vary or withdraw an Individual Capital Requirement.
  - (3) The Regulator may act under (2) on its own initiative where the Regulator forms the view that the Capital Requirement of the Authorised Person is insufficient to address adequately all its risks.

- (4) The Regulator will, where prescribing an Individual Capital Requirement, also specify in the notice the types and amounts of Capital Resources required to meet the Individual Capital Requirement.
- (5) If the Regulator decides to exercise its power under (2) after a Financial Services Permission has been granted, the Authorised Person may refer the matter to the Court for review.

**10.6.2** An Authorised Person must have and maintain, at all times, minimum Capital Resources of the types and amounts specified in the notice issued to it under Rule 10.6.1 to meet its Individual Capital Requirement.



## 11 DISCLOSURE REQUIREMENTS

### Introduction

#### Guidance

1. This Chapter specifies the disclosures required to be made by an Authorised Person to enable market participants and potential Counterparties to exercise market discipline in relation to the firm. Chapter 11 applies to banks, principal dealers and Islamic banks and specifies the disclosure requirements for such firms.
2. App12 provides a detailed list of disclosure requirements for Authorised Persons to which this Chapter applies.

### 11.1 Application and general obligation of disclosure

#### Guidance

The purpose of the requirements in this Chapter is to ensure that minimum public disclosures are made available to market participants to assist them in forming an opinion on the risk profile and capital adequacy of an Authorised Person. The Regulator expects an Authorised Person to convey its actual risk profile to market participants.

**11.1.1** An Authorised Person in Category 1, 2 or 5 must make the disclosures as prescribed in this Chapter.

**11.1.2** (1) An Authorised Person which is a member of a Financial Group must, subject to (2), ensure that the disclosures specified in App12 are made at Financial Group level.

(2) An Authorised Person which is a Subsidiary of

(a) a Financial Institution; or

(b) another Authorised Person which is in Category 1, 2 or 5;

which is already subject to equivalent public disclosure requirements, does not need to comply with the requirements in this Chapter to the extent that it meets those equivalent public disclosure requirements.

### 11.2 Disclosure policy

**11.2.1** An Authorised Person must implement and maintain a written disclosure policy that:

- (a) sets out the firm's approach for determining which of the disclosures set out in App12 it needs to make;
- (b) details the processes and procedures and its internal controls in relation to such disclosure;
- (c) details the medium for disclosure that most appropriately meets the purposes of this Chapter; and
- (d) is approved by the Governing Body of the firm.

**11.2.2** An Authorised Person must ensure that appropriate verification, whether internal or external, is performed in relation to any disclosure, and take all reasonable steps to ensure its accuracy and timeliness.

**11.2.3** To the extent that any required disclosure is substantially similar to a disclosure required of the Authorised Person under the International Financial Reporting Standards, a disclosure under such standards must be taken to meet the requirement for disclosure under this Chapter.

### **11.3 Disclosure frequency, locations and process**

#### **Frequency**

- 11.3.1** (1) The disclosures set out in this Chapter must be made by the Authorised Person at least once a year, other than disclosures of CET1 Capital, T1 Capital and T2 Capital, deductions from Capital Resources, the Leverage Ratio and its components (the capital measure and the exposure measure), and the Liquidity Coverage Ratio and its components which must be made on a quarterly basis.
- (2) Reporting deadlines must be in accordance with quarterly and annual reporting obligations contained in these Rules.

#### **Locations**

- 11.3.2** (1) An Authorised Person must, subject to (2), make these disclosures either in its annual report or periodic financial statements.
- (2) An Authorised Person may disclose the items marked as quantitative in App12 in a medium or location other than its annual report or periodic financial statements, provided that:
- (a) it has prior written approval of the Regulator to do so;
  - (b) the annual report or periodic financial statements contain clear references to the location of such disclosures; and
  - (c) such disclosures are readily accessible by the market.

#### **Guidance**

An Authorised Person has discretion to determine the form of the disclosures required, and may choose to use graphical and other representations where appropriate.

#### **Omissions**

- 11.3.3** (1) An Authorised Person may omit certain disclosures if the omitted item is:
- (a) not material, in accordance with the concept of materiality under the International Financial Reporting Standards,
  - (b) proprietary in nature, and the disclosure of the relevant information to the public would undermine the Firm's competitive position or render the Firm's investments in products and systems less valuable, or

- (c) confidential in nature, and the disclosure of the relevant information would violate or jeopardise confidentiality agreements with Clients or Counterparties.
- (2) Where in reliance upon (1)(b) or (c) an Authorised Person omits an item that is marked as a quantitative disclosure in App12, it must disclose general qualitative information about the subject matter of that particular requirement, together with the reasons for the omission.

**APP1 CATEGORIES OF AUTHORISED PERSONS****A1.1 Categorisation of Authorised Persons****Guidance**

1. This Section contains the table referred to in the Guidance notes at the commencement of Section 1.3. This table is for guidance purposes only.
2. The activities set out in the boxes in the table are Regulated Activities (see the FSMR). The Regulated Activities that an Authorised Person is authorised to carry on are specified in its Financial Services Permission. The Regulated Activities described in the emboldened boxes in the table are the determinants for the prudential Category to which the Authorised Person is assigned.
3. Where a Person carries on any one or more of the Regulated Activities specified in an emboldened box under a Category, then the highest such Category is that Person's prudential Category for the purposes of these Rules.
4. An exception to the above is an Islamic Financial Institution which Manages a Profit Sharing Investment Account which is a PSIAu. Such an institution falls into Category 5.
5. This is not a definitive list of the Regulated Activities detailed in the FSMR: others exist that are not subject to these Rules.

Category 1	Category 2	Category 3A	Category 3B	Category 3C	Category 4	Category 5
Accepting Deposits	Providing Credit	Dealing in Investments as Principal (only as a Matched Principal)	Providing Custody (only if for a Fund)	Managing a Collective Investment Fund	Arranging Credit	An Islamic Financial Institution Managing a Profit Sharing Investment Account which is a PSIAu
Managing a Profit Sharing Investment Account which is a PSIAu	Dealing in Investments as Principal (not as Matched Principal)	Dealing in Investments as Agent	Acting as the Trustee of an Investment Trust	Managing Assets	Arranging Deals in Investments	
				Managing a Profit Sharing Investment Account which is a PSIAr	Advising on Investments or Credit	
				Providing Custody other than for a Fund	Arranging Custody	
				Providing Trust Services as a trustee of an express trust	Insurance Intermediation	
				Providing Money Services	Insurance Management	
					Acting as the Administrator of a Collective Investment Fund	
					Operating a Multilateral Trading Facility or Organised Trading Facility	
					Providing Trust Services other than as a trustee of an express trust	
					Operating a Private Financing Platform	

**APP2 GENERAL REQUIREMENTS**
**A2.1 Detail in the Trading Book**

- A2.1.1** (1) This Appendix applies to an Authorised Person which meets the criteria in Rule 2.2.1 and is thereby required to have a Trading Book.
- (2) An Authorised Person which is required to have a Trading Book must:
- (a) have a Trading Book policy in accordance with Section A2.2; and
  - (b) include positions in its Trading Book on a consistent basis in accordance with the policy and procedures set out in the Trading Book policy.
- (3) An Authorised Person must include every position that is not included in its Trading Book in its Non-Trading Book.
- (4) An Authorised Person must value every position included in its Trading Book and the Non-Trading Book in accordance with the relevant accounting standards and practices.

**Value of Trading Book positions**

- A2.1.2** (1) In calculating the value of positions for the purposes of Rule 2.2.1(c) an Authorised Person 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 Person must sum all long and short positions (ignoring the sign) to calculate its total Trading Book size.

**Positions included in the Trading Book**

- A2.1.3** An Authorised Person 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 or commodity Derivative which is held with trading intent as detailed in Rule A2.1.5(3);
  - (b) each position arising from Matched Principal broking and market making;
  - (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 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**

Whenever an Authorised Person 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 Person are Counterparty Risks (that is, no Market Risk Capital Requirements apply).

- A2.1.4**
- (a) An Authorised Person must not include loans or traded loans in its Trading Book unless they have been used to hedge a Trading Book transaction.
  - (b) An Authorised Person must not include in its Trading Book an Exposure relating to a direct holding of immovable property.

### **Trading intent**

- A2.1.5**
- (1) An Authorised Person must, subject to Rule A2.1.3, only include in its Trading Book:
    - (a) a position in a Financial Instrument, commodity or commodity Derivative held with trading intent; or
    - (b) a position hedging other positions in the Trading Book.
  - (2) For the purpose of (1), such positions included in the Trading Book must be free of any restrictive covenants which limit their tradability or ability to be hedged.
  - (3) For the purpose of (1), a position in a Financial Instrument, commodity or commodity Derivative is held with trading intent if:
    - (a) it is held with the intention of:
      - (i) benefiting in the short term from actual or expected differences between buying and selling prices or from other price or interest-rate variations;
      - (ii) selling it over the short term;
      - (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 Person's internal risk management processes;
- (c) position-takers at the Authorised Person have autonomy in entering into or changing transactions within pre-determined limits, or the position satisfies other criteria which the Authorised Person applies to the composition of its Trading Book;
- (d) there is an appropriate documented trading strategy for the position, approved by senior management which includes the expected holding horizon; and
- (e) active monitoring of the position is undertaken using market information sources.

**A2.1.6** Positions held with trading intent must comply with the following requirements:

- (a) trading intent must be evidenced in the strategies, policies and procedures established by the Authorised Person to manage the position or its portfolio;
- (b) there must be clearly defined policies and procedures for active management of the position to ensure the following:
  - (i) the position is entered and/or managed on a trading desk;
  - (ii) position limits are set and monitored for appropriateness;
  - (iii) position-takers at the Authorised Person have autonomy in entering into or changing transactions within pre-determined limits, or the position satisfies other criteria which the Authorised Person applies to the composition of its Trading Book;
  - (iv) the position is marked-to-market or marked-to-model at least daily on a prudent and consistent basis as part of the Authorised Person's internal risk management processes;
  - (v) where the position is marked-to-model, the parameters for the model are assessed on a daily basis;
  - (vi) the position is monitored against the documented trading strategy including the monitoring of turnover and stale positions in the Authorised Person's Trading Book;
  - (vii) active monitoring of the position is undertaken using market information sources and an assessment made of the marketability or hedge-ability of the position or its component risks, including the assessment of the quality and availability of market inputs to the valuation process, level of markets turnover and sizes of positions traded in the market; and
  - (viii) positions and exceptions are reported to senior management as an integral part of the risk management process of the Authorised Person.

### **Treatment of structural foreign exchange positions**

**A2.1.7** An Authorised Person in Category 1 or 5 which has assumed a position in order to hedge partially or totally against the adverse effect of the exchange rate on its Capital Resources, in respect of an asset or any other item, may exclude such a position from the calculation of its net open foreign exchange positions subject to the following:

- (a) the position is of a non-dealing nature;
- (b) the position does no more than protect the Capital Resources of the Authorised Person; and
- (c) any exclusion of the position is applied consistently, with the treatment of the hedge remaining the same for the life of the asset or other item.

**A2.1.8** In calculating its net open foreign exchange positions, an Authorised Person may exclude any foreign exchange position related to:

- (a) items which are included as deductions from T1 Capital or deductions from T2 Capital, such as investments in unconsolidated subsidiaries; and
- (b) associated companies and joint ventures, denominated in foreign currencies, which are reported in the published accounts of an Authorised Person at historic cost.

### **Repurchase and reverse repurchase agreements**

**A2.1.9** An Authorised Person must include in its Trading Book 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 Person'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. The Trading Book treatment for such Exposures is set out in Rule A4.7.

**A2.1.10** Where the conditions under Rule A2.1.9 are not met, an Authorised Person must, subject to Rule A2.1.3, 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 Rules in A4.8 and A4.9.

### **Hedging of a Trading Book Exposure by a non-Financial Instrument**

- A2.1.11** (1) An Authorised Person may hedge a Trading Book Exposure, completely or partially, by a non-Financial Instrument that is not listed in A2.1.3. 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 Person's Trading Book;
  - (b) the hedge position satisfies the Netting rules contained in the relevant Sections of the Market Risk Chapter; and
  - (c) the hedge position is marked to market or marked to model and is valued regularly on a prudent and consistent basis.
- (2) For the purposes of (1), the non-Financial Instrument must be treated as attracting capital charges as if it were a Financial Instrument.

### **Guidance**

1. If the conditions for incorporating non-Financial Instruments in the calculation of General Market Risk in the Trading Book under Rule A2.1.11 are not met, they will be treated as Non-Trading Book items.
2. For the purposes of Section A2.1, a loan will attract General Market Risk (see Chapter 5) and Counterparty Risk (see Chapter 4) on the marked-to-market valuation.

- A2.1.12** (1) If an internal hedge meets the criteria specified in (2), an Authorised Person may include it in the Trading Book without prejudice to the Capital Requirement application to the Non-Trading Book "leg" of the internal hedge.
- (2) Positions arising from internal hedges are eligible for Trading Book capital treatment, provided that they meet the criteria for trading intent specified in Rule A2.1.5 and the following criteria on prudent valuation:
- (a) the internal hedge is not primarily intended to avoid or reduce Capital Requirements which the Authorised Person would be otherwise required to maintain;
  - (b) the internal hedge is properly documented and subject to specific internal approval and audit procedures;
  - (c) the internal hedge is dealt with at market conditions;

- (d) the bulk of the Market Risk which is generated by the internal hedge is dynamically managed in the Trading Book within the limits approved by senior management; and
  - (e) the internal hedge is carefully monitored with adequate procedures.
- (3) Where an Authorised Person hedges a Non-Trading Book Exposure using a Credit Derivative booked in the Trading Book, the Non-Trading Book Exposure is not deemed to be hedged for the purpose of calculating its regulatory Capital Requirement, unless the Authorised Person purchases from an eligible protection provider a Credit Derivative which complies with the requirements and meets the guidelines set out in the relevant Section of Chapter 4. Where eligible credit protection is purchased and is recognised as a hedge of the Non-Trading Book Exposure for the purpose of calculating its regulatory Capital Requirement, the Authorised Person may exclude both the internal and external Credit Derivative hedge from the Trading Book for the purpose of calculating its regulatory Capital Requirement for the period of the hedge.

### **Guidance**

An internal hedge is a position that materially or completely offsets the component risk element of a Non-Trading Book position or a set of positions.

### **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.
2. An Authorised Person 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.

#### **A2.1.13** An Authorised Person 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 A2.1.13(c) is as follows:

- a. An Authorised Person 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 Authorised Person 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 A2.1.14). 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 an Authorised Person 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.

**A2.1.14** Appropriate documentation under A2.1.13 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 Person 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.

## **A2.2 Trading Book policy**

#### **Guidance**

The requirement for a Trading Book policy is prescribed in Rule A2.1.1.

**A2.2.1** A Trading Book policy must include clearly defined policies, procedures and methodologies by which the Authorised Person:

- (a) defines its Trading Book and identifies positions to be included in its Trading Book;
- (b) allocates positions between the Non-Trading Book and the Trading Book;
- (c) actively manages and values its positions in the Trading Book;
- (d) measures its Trading Book risks; and

- (e) controls transfers of positions between the Non-Trading Book and the Trading Book.

**A2.2.2** An Authorised Person must obtain the prior written approval of its Governing Body for its Trading Book policy. The Authorised Person must review and where necessary update the policy at least annually. The Authorised Person must obtain the prior written approval of the Governing Body for all significant changes.

**A2.2.3** An Authorised Person must, without undue delay, notify the Regulator when its Governing Body approves the adoption of a Trading Book policy or approves any changes to the policy.

### **Guidance**

1. At a minimum, the Regulator expects that a Trading Book policy will address the following:
  - a. the definition of Trading Book and trading strategy, including:
    - i. the activities that the Authorised Person considers to be trading and the types of positions that are to be allocated to the Trading Book for the purposes of calculating its regulatory Capital Requirements;
    - ii. the types of positions that are excluded from the Trading Book; and
    - iii. the procedures to ensure that the criteria by which positions are allocated to the Trading Book are adhered to on a consistent basis, including details on:
      - A. the organisational unit or department within the Authorised Person responsible for monitoring adherence to the Trading Book policy;
      - B. the frequency of monitoring;
      - C. process and methodology of this monitoring; and
      - D. how the continuing appropriateness of allocations is confirmed;
  - b. the extent of active management and valuation, including:
    - i. the extent to which a position can be marked-to-market daily by reference to an active, liquid two-way market;
    - ii. for positions which are marked-to-model, the extent to which the Authorised Person can:
      - A. identify all the material risks of the position;
      - B. hedge the material risks of the position and, where the material risks of the position are hedged, the extent to which hedging instruments used have an active and liquid two-way market; and

- C. derive reliable external estimates for the key assumptions and parameters used in the model;
    - iii. the extent to which the Authorised Person can, and is required to, generate valuations for the position which can validated externally by its Auditors or by the Regulator in a consistent manner;
    - iv. the extent to which the Authorised Person can, and is required to, maintain documents to support valuations of its Trading Book positions;
    - v. the basis for determining and maintaining valuation adjustments for the purposes of calculating regulatory Capital Requirements;
    - vi. the extent to which legal restrictions or other operational requirements would impede the ability of the Authorised Person to effect an immediate liquidation of the position; and
    - vii. the extent to which the Authorised Person can, and is required to, actively risk manage a position within its trading operations;
  - c. transfers between Non-Trading and Trading Books, including:
    - i. the extent to which an Authorised Person may transfer positions between the Non-Trading Book and the Trading Book and the criteria for such transfers;
    - ii. the procedures to effect such transfers; and
    - iii. the controls in place to prevent inappropriate transfers of positions between the Non-Trading Book and the Trading Book; and
  - d. the following additional considerations:
    - i. whether there are any subsidiaries or offshore branches of the Authorised Person undertaking transactions to be included in the Trading Book. If so, a list of such subsidiaries or branches shall be included, along with a description of the trading activities carried out by such entities;
    - ii. the treatment of inter-desk deals; and
    - iii. the identification and management of structural foreign exchange positions.
2. An Authorised Person should prepare its Trading Book policy on a consolidated basis where the Financial Group either manages its trading risk centrally or employs the same risk management techniques across all the entities in the Financial Group. Where a Trading Book policy is prepared on a consolidated basis, an Authorised Person should ensure that its application to the Authorised Person and each of the other entities in the



Financial Group is made clear and approved by the Governing Body of the Authorised Person and the Governing Body of each of those entities.

## **A2.3 Risk management systems and controls for Trading Book**

**A2.3.1** An Authorised Person must establish and maintain effective systems and controls to manage its Trading Book.

**A2.3.2** An Authorised Person must establish and maintain systems and controls sufficient to provide prudent and reliable valuation estimates. These systems and controls must include:

- (a) documented policies and procedures for the process of valuation (including clearly defined responsibilities of the various areas involved in the determination of the valuation, sources of market information and review of their appropriateness, frequency of independent valuation, timing of closing prices, procedures for adjusting valuations, month end and ad-hoc verification procedures); and
- (b) reporting lines for the department accountable for the valuation process that are clear and independent of the front office.

## **A2.4 Reporting to the Regulator**

**A2.4.1** The forms to be used by Authorised Persons for the purpose of reporting under these Rules are set out in EPRS.

## **A2.5 Prudent Valuation Practices**

### **Guidance**

1. This following guidance sets out the Regulator's expectations for prudent valuation practices, including adequate systems and controls and valuation methodologies, for the purpose of Section 2.4 of these Rules.

### **Systems and controls**

2. Authorised Persons should establish and maintain adequate systems and controls sufficient to give management and the Regulator the confidence that their valuation estimates are prudent and reliable. These systems should be integrated with other risk management systems within the organisation (such as credit analysis). Such systems are expected to include:
  - a. documented policies and procedures for the process of valuation. This includes clearly defined responsibilities of the various areas involved in the determination of the valuation, sources of market information and review of their appropriateness, guidelines for the use of unobservable inputs reflecting the Authorised Person's assumptions of what market participants would use in pricing the position, frequency of independent valuation, timing of closing prices, procedures for adjusting valuations, end of the month and ad-hoc verification procedures; and
  - b. clear and independent (i.e. independent of front office) reporting lines for the department accountable for the valuation process. The

reporting line should ultimately be to a main board executive Director or equivalent.

## **Valuation methodologies**

### **Marking-to-market**

3. Marking-to-market is at least the daily valuation of positions at readily available close out prices in orderly transactions that are sourced independently. Examples of readily available close out prices include exchange prices, screen prices, or quotes from several independent reputable brokers.
4. Authorised Persons should mark-to-market as much as possible. The more prudent side of bid/offer should be used unless the institution is a significant market maker in a particular position type and it can close out at mid-market. Authorised Persons should maximise the use of relevant observable inputs and minimise the use of unobservable inputs when estimating fair value using a valuation technique. However, observable inputs or transactions may not be relevant, such as in a forced liquidation or distressed sale, or transactions may not be observable, such as when markets are inactive. In such cases, the observable data should be considered, but may not be determinative.

### **Marking-to-Model**

5. Only where marking-to-market is not possible should Authorised Persons mark-to-model, but in such cases, the Authorised Person should be able to demonstrate to the Regulator that the approach is prudent. Marking-to-model is defined as any valuation which has to be benchmarked, extrapolated or otherwise calculated from a market input. When marking-to-model, an extra degree of conservatism is appropriate. The Regulator will consider the following in assessing whether a mark-to-model valuation is prudent:
  - a. senior management should be aware of the elements of the Trading Book or of other fair-valued positions which are subject to mark-to-model and should understand the materiality of the uncertainty this creates in the reporting of the risk/performance of the business;
  - b. market inputs should be sourced, to the extent possible, in line with market prices (as discussed above). The appropriateness of the market inputs for the particular position being valued should be reviewed regularly;
  - c. where available, generally accepted valuation methodologies for particular products should be used as far as possible;
  - d. where the model is developed by the Authorised Person itself, it should be based on appropriate assumptions, which have been assessed and challenged by suitably qualified parties independent of the development process. The model should be developed or approved independently of the front office. It should be independently tested. This includes validating the mathematics, the assumptions and the software implementation;

- e. there should be formal change control procedures in place and a secure copy of the model should be held and periodically used to check valuations;
- f. risk management should be aware of the weaknesses of the models used and how best to reflect those in the valuation output;
- g. the model should be subject to periodic review to determine the accuracy of its performance (e.g. assessing continued appropriateness of the assumptions, analysis of profit and loss versus risk factors, comparison of actual close out values to model outputs); and
- h. valuation adjustments should be made as appropriate, for example, to cover the uncertainty of the model valuation (see also valuation adjustments in Guidance notes 6 to 14.)

### **Independent price verification**

- 6. Independent price verification is distinct from daily mark-to-market. It is the process by which market prices or model inputs are regularly verified for accuracy. While daily marking-to-market may be performed by dealers, verification of market prices or model inputs should be performed by a unit independent of the dealing room, at least monthly (or, depending on the nature of the market/trading activity, more frequently). It need not be performed as frequently as daily mark-to-market, since the objective, i.e. independent, marking of positions should reveal any error or bias in pricing, which should result in the elimination of inaccurate daily marks.
- 7. Independent price verification entails a higher standard of accuracy in that the market prices or model inputs are used to determine profit and loss figures, whereas daily marks are used primarily for management reporting in between reporting dates. For independent price verification, where pricing sources are more subjective, e.g. only one available broker quote, prudent measures such as valuation adjustments may be appropriate.

### **Valuation adjustments**

- 8. As part of their procedures for marking-to-market, Authorised Persons should establish and maintain procedures for considering valuation adjustments. The Regulator expects Authorised Persons using third-party valuations to consider whether valuation adjustments are necessary. Such considerations are also necessary when marking-to-model.
- 9. The Regulator expects the following valuation adjustments to be formally considered at a minimum: unearned credit spreads, close-out costs, Operational Risks, early termination, investing and funding costs, and future administrative costs and, where appropriate, model risk.

### **Adjustment to the current valuation of less liquid positions for regulatory capital purposes**

- 10. Authorised Persons should establish and maintain procedures for judging the necessity of and calculating an adjustment to the current valuation of less liquid positions for regulatory capital purposes. This adjustment may be in addition to any changes to the value of the position required for

financial reporting purposes and should be designed to reflect the illiquidity of the position. The Regulator expects Authorised Persons to consider the need for an adjustment to a position's valuation to reflect current illiquidity whether the position is marked-to-market using market prices or observable inputs, third-party valuations or marked-to-model.

11. Bearing in mind that the assumptions made in relation to calculating VaR may not be consistent with the Authorised Person's ability to sell or hedge out less liquid positions, where appropriate, Authorised Persons should take an adjustment to the current valuation of these positions, and review their continued appropriateness on an on-going basis. Reduced liquidity may have arisen from market events. Additionally, close-out prices for concentrated positions and/or stale positions should be considered in establishing the adjustment.
12. Authorised Persons should consider all relevant factors when determining the appropriateness of the adjustment for less liquid positions. These factors may include, but are not limited to, the amount of time it would take to hedge out the position/risks within the position, the average volatility of bid/offer spreads, the availability of independent market quotes (number and identity of market makers), the average and volatility of trading volumes (including trading volumes during periods of market stress), market concentrations, the aging of positions, the extent to which valuation relies on marking-to-model, and the impact of other model risks not included in Guidance note 10.
13. For complex products including, but not limited to, securitisation Exposures and  $n^{\text{th}}$ -to-default Credit Derivatives, Authorised Persons which are approved to use models to calculate Market Risk should explicitly assess the need for valuation adjustments to reflect two forms of model risk: the model risk associated with using a possibly incorrect valuation methodology; and the risk associated with using unobservable (and possibly incorrect) calibration parameters in the valuation model.
14. The adjustment to the current valuation of less liquid positions made under Guidance note 11 is likely to impact minimum Capital Requirements and may exceed those valuation adjustments made under the International Financial Reporting Standards and Guidance notes 8 and 9.

**APP3 CAPITAL AND LEVERAGE**
**A3.1 Stress and scenario testing**
**Guidance**

1. Stress and scenario testing seek to anticipate possible losses or risks that might occur or become manifest. In applying them an Authorised Person 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 Person 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 Person, if needed, to sell its holding so as to prevent or reduce its Exposure to future price fluctuations.
3. Authorised Persons 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 Person 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 Person 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 Person 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 Person 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 Regulator of assets held in other jurisdictions.

## A3.2 Capital Requirements

### Guidance

- This table summarises the Capital Requirement that an Authorised Person is subject to and an Authorised Person must hold sufficient Capital Resources at all times to meet the Capital Requirement.

Capital Requirement(USD)				
Category	<-----maximum of----->			
	Base Capital Requirement <sup>2</sup>	Expenditure Based Capital Minimum <sup>3</sup>		Risk Capital Requirement <sup>5</sup>
		Holding Client Assets or Relevant Money <sup>4</sup> or Insurance Money?		
		No	Yes	
1	10mn			Credit, Market, Operational and CVA (plus, where appropriate, Displaced Commercial)
2	2mn			Credit, Market, Operational and CVA
3A	500k			See guidance note 8 for Money Remitters and Payment Service Providers
3B <sup>6</sup>	4mn	13/52nds of Annual Expenditure	18/52nds of Annual Expenditure	
3C <sup>6</sup>	250k			
	except where an Authorised Person has a Financial Services Permission only to carry out the Regulated Activity of Managing a Collective Investment Fund, in which case the Base Capital Requirement is the higher of: a) 150,000 if the Authorised Person manages a Public Fund or any other type of fund that is available to retail customers; or b) 50,000 otherwise.			
4 <sup>6, 7</sup>	10k			



	except where an Authorised Person has a Financial Services Permission: a) to carry out the Regulated Activity of Operating a Private Financing Platform and holds Client Assets, in which case the Base Capital Requirement is 150,000; or b) to carry out the Regulated Activity of Providing Third Party Services, in which case the Base Capital Requirement will be 50,000.	6/52nds of Annual Expenditure		
<b>5</b>	10mn			Credit, Market, Operational, CVA and Displaced Commercial

2. An Authorised Person, whichever Category it is a member of, must hold a minimum amount of CET1 Capital at the time that it obtains authorisation and at all times thereafter, in accordance with Rule 3.3.3, corresponding to the Base Capital Requirement.
3. The Expenditure Based Capital Minimum is calculated as the specified proportion of the Annual Audited Expenditure (AAE), calculated in accordance with Rule 3.7.2.
4. An Authorised Person in Category 3C undertaking the Regulated Activity of Providing Money Services that offers only one of or both currency exchange and Money Remittance to their customers, but not Payment Services, is considered not to hold Client Assets, in the form of Client Money, or Relevant Money.
5. Where the Risk Capital Requirement is the binding capital requirement for an Authorised Person in Category 1, 2 or 5 it must also hold a Capital Conservation Buffer of CET1 Capital of 2.5% of the Total Risk Exposure Amount and, where applicable, a Countercyclical Capital Buffer of CET1 Capital, to be determined in accordance with Section 3.18.
6. An Authorised Person in Category 3B, 3C or 4 must notify the Regulator immediately if its Capital Resources fall below 120% of its Capital Requirement, in accordance with Rule 3.20.2.
7. An Authorised Person in Category 4 is only permitted to hold Insurance Monies.

8. An Authorised Person in Category 3C undertaking the Regulated Activity of Providing Money Services must calculate its Capital Requirement in accordance with the table below; where applicable, a Variable Capital Requirement must be calculated for activities undertaken as (a) a Money Remitter, (b) a Payment Account Provider and (c) a Stored Value Issuer and combined in accordance with Rule 3.6A.7 to determine the Total Variable Capital Requirement.

Activity	Capital Requirement (USD)			
	<-----maximum of----- ----->			
	BCR	EBCM (of AAE) <sup>9</sup>	VCR	
Currency Exchange	250k	13/52nds	n/a	
Money Remitter		13/52nds	Sole activity	Both activities
			Sum of the following elements, based on monthly payment volume: (i) 1.25% of the first 10 million; (ii) 0.5% of the next 90 million; (iii) 0.25% of the next 150 million; and (iv) 0.125% of remaining monthly payment volume	Sum of the following elements, based on combined monthly payment volume across both activities: (i) 2.5% of the first 10 million; (ii) 1.0% of the next 90 million; (iii) 0.5% of the next 150 million; and (iv) 0.25% of remaining monthly payment volume
Payment Account Provider		n/a	Sum of the following elements, based on monthly payment volume: (i) 2.5% of the first 10 million; (ii) 1.0% of the next 90 million; (iii) 0.5% of the next 150 million; and (iv) 0.25% of remaining monthly payment volume	
Stored Value Provider		n/a	2.5% of average outstanding Stored Value	

9. Where an Authorised Person offers both (i) currency exchange or Money Remittance and (ii) Payment Services to its customers it must calculate the Expenditure Based Capital Minimum as 18/52nds of AAE.

**APP4 CREDIT RISK****A4.1 Credit Risk systems and controls****Guidance**

1. Depending on an Authorised Person's nature, scale, frequency, and complexity of Credit Risk granted or incurred, the Credit Risk policy of an Authorised Person should address the following elements:
  - a. how, with particular reference to its activities, the Authorised Person defines and measures Credit Risk;
  - b. the Authorised Person's business aims in incurring Credit Risk including:
    - i. identifying the types and sources of Credit Risk to which the Authorised Person wishes to be exposed (and the limits on that Exposure) and those to which the Authorised Person wishes not to be exposed;
    - ii. specifying the level of diversification required by the Authorised Person and the Authorised Person's tolerance for risk concentrations and the limits on those Exposures and concentrations; and
    - iii. stating the risk-return that the Authorised Person is seeking to achieve on Credit Risk Exposures;
  - c. types of facilities to be offered, along with ceilings, pricing, profitability, maximum maturities and maximum debt-servicing ratios for each type of lending;
  - d. a ceiling for the total loan portfolio, in terms, for example, of the loan-to-Deposit ratio, undrawn commitment ratio, a maximum dollar amount or a percentage of capital base;
  - e. portfolio limits for maximum aggregate Exposures by country, industry, category of borrower/Counterparty (e.g. banks, non-bank Financial Institutions, corporates and retail), product (e.g. property lending), Groups of related parties and single borrowers;
  - f. limits, terms and conditions, approval and review procedures and records kept for Connected lending - all Authorised Persons should have a formal policy statement, endorsed by the Governing Body, on such lending covering these matters;
  - g. types of acceptable Collateral, loan-to-value ratios and the criteria for accepting guarantees; and
  - h. 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;
  - i. 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 Person's business aims, historical performance, and the level of capital the Authorised Person is willing to risk;
  - j. 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;
  - k. the allocation of responsibilities for implementing the Credit Risk policy and for monitoring adherence to, and the effectiveness of, the policy; and
  - l. the required information systems, staff and other resources.
2. The Credit Risk policy should emphasize the principles of prudence and should be enforced consistently. The policy and its implementation should ensure that credit facilities are only granted to credit-worthy customers and that risk concentrations are avoided.
  3. The Credit Risk strategy and policy need to be clearly disseminated to, and understood by all relevant staff.
  4. The Credit Risk policy of an Authorised Person should clearly specify the delegation of its credit approval authorities. Credit authority thus delegated should be appropriate for the products or portfolios assigned to the credit committee or individual credit officers and should be commensurate with their credit experience and expertise. An officer's credit authority may, however, be increased on the basis of his or her track record. An Authorised Person should ensure that credit authority is required for acquiring any types of credit Exposures, including the use of Credit Derivatives for hedging or income generation.
  5. Credit authority delegated to the credit committee and each credit officer should be subject to regular review to ensure that it remains appropriate to current market conditions and the level of their performance.
  6. An Authorised Person's remuneration policies applicable to all staff should be consistent with its Credit Risk strategy.

The policies should not encourage officers to generate short-term profits by taking an unacceptably high level of risk.

**Counterparty Risk assessment**

7. The Authorised Person 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 Person;
  - 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, cash flow 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;
  - g. the proposed terms and conditions attached to the granting of credit, including on-going provision of information by the Counterparty, covenants attached to the facility, the adequacy and enforceability of Collateral and guarantees; and
  - h. the Authorised Person's existing Exposure to the individual Counterparty, sector, country or product and the availability of credit given Exposure limits.
8. An Authorised Person should document any variation from the usual credit policy.
9. An Authorised Person 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.
10. An Authorised Person granting credit to obligors in other countries should be cognisant of the additional risks – country risk and transfer risk – involved in such credits. An Authorised Person should therefore consider the environment – economic and political – in the relevant countries, the potential effect of changes thereto on the obligors' ability to service the credit and the contagion effects in regions where economies are closely related.

11. The exception reporting should be adequately supported by a management reporting system whereby relevant reports on the credit portfolio are generated to various levels of management on a timely basis.
12. Connected Counterparties should be identified and the procedures for the management of the combined Credit Risk considered. It may be appropriate for Authorised Persons to monitor and report the aggregate Exposure against combined limits in addition to monitoring the constituent Exposures to the individual Counterparties.
13. An Authorised Person 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**

14. An Authorised Person 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.
15. In assessing its contingent Exposure to a Counterparty, the Authorised Person 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.
16. An Authorised Person should clearly specify the delegation of its credit approval authorities. Credit authority thus delegated should be appropriate for the products or portfolios assigned to the credit committee or individual credit officers and should be commensurate with their credit experience and expertise. An officer's credit authority may, however, be increased on the basis of his or her track record. An Authorised Person should ensure that credit authority is required for acquiring any types of credit Exposures, including the use of Credit Derivatives for hedging or income generation.
17. Credit authority delegated to the credit committee and each credit officer should be subject to regular review to ensure that it remains appropriate to current market conditions and the level of their performance.

#### **Credit approval procedures**

18. An Authorised Person should adhere closely to the "Know Your Customer" principle and should not lend purely on name and relationship without a comprehensive assessment of the credit quality of the borrower.



19. Credit decisions should be supported by adequate evaluation of the borrower's repayment ability based on reliable information. Sufficient and up-to-date information should continue to be available to enable effective monitoring of the account.
20. All credits should be granted on an arm's length basis. Credits to related borrowers should be monitored carefully and steps taken to control or reduce the risks of Connected lending.
21. An Authorised Person should not rely excessively on Collateral or guarantees as Credit Risk mitigants. Such Credit Risk mitigants may provide secondary protection to the lender if the borrower defaults, the primary consideration for credit approval should be the borrower's debt-servicing capacity.
22. An Authorised Person should be sensitive to rapid expansion of specific types of lending. Such trends may often be accompanied by deterioration of credit standards and thus merit increased focus on more marginal borrowers.
23. An Authorised Person should ensure through periodic independent audits that the credit approval function is being properly managed and that credit Exposures comply with prudential standards and internal limits. The results of such audits should be reported directly to the Governing Body, the credit committee or senior management as appropriate.

### **Risk control**

24. An Authorised Person 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 Person can manage credit Exposure more carefully and avoid excessive concentrations of risk.
25. The Credit Risk policy of an Authorised Person should include a policy to control and monitor Large Exposures and other risk concentrations. An Authorised Person should carefully manage and avoid excessive risk concentrations of various kinds. These include Exposure to:
  - a. individual borrowers (in particular Exposure exceeding 10% of the firm's capital base);
  - b. Groups of borrowers with similar characteristics, economic and geographical sectors; and
  - c. types of lending with similar characteristics (e.g. those based on assets with similar price behaviour).
26. Notwithstanding the threshold specified as part of the prudential Rules on Large Exposures, Authorised Persons should exercise particular care in relation to facilities exceeding 10% of Tier 1.
27. Authorised Persons should recognise and control the Credit Risk arising from their new products and services. Well in advance of entering into business transactions involving new types of products and activities, they

should ensure that they understand the risks fully and have established appropriate Credit Risk policies, procedures and controls, which should be approved by the Governing Body or its appropriate delegated committee. A formal risk assessment of new products and activities should also be performed and documented.

28. An Authorised Person in Category 1, 2, 3A or 5 is also subject to concentration limits and notification requirements as spelt out in Chapter 4.

### **Risk measurement**

29. An Authorised Person should measure its Credit Risk using a robust and consistent methodology, which should be described in its Credit Risk policy. The Authorised Person should consider whether the measurement methodology should be back-tested and the frequency of any such back-testing.
30. An Authorised Person 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.
31. Where an Authorised Person is a member of a Group, the Group should be able to monitor credit Exposures on a consolidated basis.
32. An Authorised Person should have the capability to measure its credit Exposure to individual Counterparties on at least a daily basis.
33. Authorised Persons should analyse their credit portfolios to identify material inter-dependencies which can exaggerate risk concentrations. The importance can be illustrated by the contagion effects that a substantial decline in property or stock prices may have on the default rate of those commercial and industrial loans which rely heavily on such types of Collateral.
34. Authorised Persons should establish a system of regular independent credit and compliance audits. These audits should be performed by independent parties, e.g. internal audit and compliance, which report to the Governing Body or the audit committee.
35. Credit audits should be conducted to assess individual credits on a sampling basis and the overall quality of the credit portfolio. Such audits are useful for evaluating the performance of account officers and the effectiveness of the credit process. They can also enable Authorised Persons to take early measures to protect their loans.

### **Risk monitoring**

36. An Authorised Person 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.
37. An Authorised Person 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 Person.

38. Adequacy and sophistication of Credit Risk measurement tools required depends on the complexity and degree of the inherent risks of the products involved. An Authorised Person should have information systems and analytical techniques that provide sufficient information on the risk profile and structure of the credit portfolio. These should be flexible to help Authorised Person to identify risk concentrations. To achieve this, an Authorised Person system should be capable of analysing its credit portfolio by the following characteristics:
  - a. size of Exposure;
  - b. Exposure to Groups of related borrowers;
  - c. products;
  - d. sectors, e.g. geographic, industrial;
  - e. borrowers' demographic profile for consumer credits, e.g. age or income group, if appropriate;
  - f. account performance;
  - g. internal credit ratings;
  - h. outstandings versus commitments; and
  - i. types and coverage of Collateral.
39. An Authorised Person should have procedures for taking appropriate action according to the information within the management reports, such as a review of Counterparty limits.
40. 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.
41. 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 Person'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.
42. An Authorised Person should have in place a system for monitoring the overall quality of its Credit Risk Exposures under normal and stressful conditions. There should also be a reporting system which alerts management to aggregate Exposures approaching various pre-set portfolio limits.
43. An Authorised Person should be mindful of business and economic cycles and regularly stress-test their portfolios against adverse market scenarios.

Adequate contingency planning should be developed in conjunction with stress-testing to address the possibility of crises developing in a very rapid fashion.

44. 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 Person's Credit Risk. This information can be utilised to inform the Authorised Person's on-going credit strategy.
45. As new techniques for Credit Risk management, monitoring and reporting are developed, the Authorised Person should ensure they are tested and evaluated before undue reliance is placed upon them.
46. Where the account officer for a credit (or customer relationship manager, branch manager or similar) moves on, the incoming officer should carry out a take-over review. The review should cover inter alia the credit-worthiness of the borrowers, the adequacy of the documentation, compliance with covenants, performance of each loan and the existence and value of any Collateral.

### **Problem Exposures**

47. An Authorised Person should have processes for the timely identification and management of problem Exposures. These processes should be described in the Credit Risk policy.
48. An Authorised Person involved in Providing Credit should establish a dedicated unit to handle the recovery and work-out of problem loans and should establish policies for the referral of loans to this unit.
49. An Authorised Person should ensure that its loan portfolio is properly classified and has an effective early-warning system for problem loans.
50. An Authorised Person should develop and implement internal risk rating systems for managing Credit Risk. The rating system should be consistent with the nature, size and complexity of the Authorised Person's activities. In using internal risk ratings, an Authorised Person should seek to achieve a high granularity in the rating system and adopt multiple grades for loans that are not yet irregular and to develop the ability to track the migration of individual loans through the various internal credit ratings.
51. Depending on the size and nature of the Authorised Person, 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 on-going business relationship with the Counterparty.
52. Exposures identified as problems or potential problems should be closely monitored by management, and an Authorised Person 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.

53. It is recommended that Authorised Persons establish a dedicated unit to handle the recovery and work-out of problem loans and put in place policies for the referral of loans to this unit.
54. An Authorised Person 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 Person's solicitors.
55. Requirements relating to provisioning against loss on problem Exposures are covered in Chapter 4.

### **Risk mitigation**

56. 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 Persons should view these as complementary to, rather than a replacement for, thorough credit analysis and procedures.
57. In controlling Credit Risk, an Authorised Person may utilise certain mitigation techniques.

Normally, they include:

- a. accepting Collateral, standby letters of credit and guarantees;
  - b. entering into Netting arrangements;
  - c. setting strict loan covenants; and
  - d. using Credit Derivatives and other hedging instruments.
58. In determining which types of credit mitigation techniques should be used, firms should also consider:
    - a. their own knowledge and experience in using such techniques;
    - b. cost-effectiveness;
    - c. type and financial strength of the Counterparties or Issuers;
    - d. correlation with the underlying credits;
    - e. availability, liquidity and realisability of the credit mitigation instruments;
    - f. the extent to which legally recognised documentation, e.g. ISDA Master Agreement, can be adopted; and
    - g. the degree of supervisory recognition of the mitigation technique.
  59. While mitigation through Collateral and guarantees is usually dealt with at the time of granting of credits, Credit Derivatives and Netting are often employed after the credit is in place, or used to manage the overall portfolio risk. When the mitigation arrangements are in place they should

then be controlled. Authorised Persons should have written policies, procedures and controls for the use of credit mitigation techniques. They should also ensure adequate systems are in place to manage these activities.

60. Authorised Persons should revalue their Collateral and mitigation instruments on a regular basis.

The method and frequency of revaluation depends on the nature of the hedge and the products involved.

61. If an Authorised Person 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.
62. 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.
63. When taking Collateral in support of an Exposure, an Authorised Person should ensure that legal procedures have been followed, to ensure the Collateral can be enforced if required.
64. An Authorised Person should consider the legal and financial ability of a guarantor to fulfil the guarantee were it called upon to perform its obligations as guarantor.
65. An Authorised Person 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.
66. An Authorised Person 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**

67. The Authorised Person should maintain appropriate records of:
- a. credit Exposures, including aggregations of credit Exposures, by:
    - 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.
68. 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.
69. 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 Person should therefore consider whether it is appropriate for an independent legal opinion to be sought on documentation used by the Authorised Person. Documentation should be in place before the Authorised Person enters into a contractual obligation or releases funds.

### **Country and transfer risk Exposure**

70. Chapter 4 does not provide limits on the size of an Authorised Person's Exposure to a particular country or region. However, an Authorised Person which has Large Exposures in a country or region should include in its Credit Risk policy:
- a. the geographical areas in which the Authorised Person does or intends to do business;
  - b. its definition of Credit Risk Exposure and transfer risks (such as exchange restrictions) associated with doing business 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 Person intends to undertake in each country or region;
  - e. limits on Exposures to an individual country or region which the Authorised Person 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 Person's actual country or regional Exposures will be monitored against limits and the procedure to be followed if the limits are breached.
71. When setting country or regional limits, an Authorised Person should consider:
- a. the economic and political circumstances prevailing in the country or region;



- b. the transfer risks associated with any particular country or region;
- c. the type and maturity of business undertaken by the Authorised Person in a particular country or region;
- d. the Authorised Person's existing concentration of country or regional risk;
- e. the source of funding for the country or regional Exposure; and
- f. sovereign or other guarantees offered.

### **Provisioning**

72. Depending upon the nature of the Authorised Person and its business, the Authorised Person'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 - it should include both on balance sheet and off balance sheet Exposures and assets;
  - f. where it takes different approaches to different lines of its business and the key features of those differences;
  - 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 Person holds affects the need for or size of provision;
  - j. on what basis the Authorised Person 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 Person's provisioning policy is being implemented properly, and the

measures the Authorised Person has in place if its provisioning policies are not adhered to;

- l. who is responsible for the regular reviews of the Authorised Person'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 Person'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 Person'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;
  - p. the frequency of any review of its write off experience against provisions raised; such a review can help identify whether an Authorised Person's policies result in over or under provisioning across the business cycle, and contribute to a general review of an Authorised Person's provisioning policy and the design of any loan grading systems, Credit Risk models, and risk pricing; and
  - q. the Authorised Person'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.
73. Provisions may be general (against the whole of a given portfolio) or specific (against particular Exposures identified as bad or doubtful), or both. The Regulator expects contingent liabilities and anticipated losses to be recognised in accordance with the applicable accounting standards.
74. Appropriate systems and controls for provisions vary with the nature, scale and complexity of the credit granted. An Authorised Person 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 Person for which Credit Risk is incidental to the operation of its business.
75. The Regulator recognises that the frequency with which an Authorised Person reviews its provisioning policy once it has been established will vary from firm to firm. However, the Regulator expects an Authorised Person to review its policy to ensure it remains appropriate for the business it undertakes and the economic environment in which it operates. The

provisioning policy should be reviewed at least annually by the Governing Body.

#### A4.2 Credit conversion factors (CCFs) for calculating Exposures

##### CCFs for off-balance sheet CR Exposures

**A4.2.1** The applicable CCFs for off-balance sheet CR Exposures are provided in the table below.

Description of off-balance sheet item		CCF
(a)	Direct credit substitutes	100%
(b)	Transaction-related contingent items	50%
(c)	Short-term self-liquidating trade-related contingent items (applicable to both issuing and confirming banks) and commitments to underwrite debt and equity Securities	20%
(d)	Note issuance facilities and revolving Underwriting facilities	50%
(e)	Transactions, other than SFTs, involving the posting of Securities held by the Authorised Person as Collateral	100%
(f)	Asset sales with recourse, where the Credit Risk remains with the Authorised Person	100%
(g)	Other commitments with certain drawdown	100%
(h)	Other commitments:	
(i)	with an Original Maturity of more than one year;	50%
(ii)	with an Original Maturity of one year or less;	20%
(iii)	which are unconditionally cancellable at any time by the Authorised Person without prior notice, or that effectively provide for automatic cancellation due to a deterioration in the creditworthiness of an obligor	0%

#### Guidance

1. In cases where there is an undertaking to provide a commitment on another off-balance sheet Exposure, an Authorised Person should apply the lower of the applicable CCFs. Examples of direct credit substitutes include general guarantees of indebtedness, standby letters of credit serving as financial guarantees for loans and Securities, and acceptances (including endorsements with the character of acceptances). Examples of transaction-related contingent items include performance bonds, bid bonds, warranties and standby letters of credit related to particular transactions.

2. Documentary credits collateralised by the underlying shipments are an example of short-term self-liquidating trade-related contingent items. In respect of item (f) in the table above, the terms of the agreement should be such that there is no substantial transfer of all risks and rewards of ownership to the Counterparty. Other commitments with certain drawdown would include forward purchase, forward Deposits and partly paid Securities. Formal standby facilities and credit lines are examples of other commitments, referred to in item (h) of the table above.
3. In respect of item (h)(iii) in the table above, an Authorised Person, if required to by the Regulator, should be able to demonstrate that it actively monitors the financial condition of the obligor, and that its internal control systems are such that it is able to cancel the facility upon evidence of a deterioration in the credit quality of the obligor.

### CCFs for off-balance sheet SE Exposures

- A4.2.2** (1) The applicable CCFs for off-balance sheet SE Exposures are provided in the table below.

Description of off-balance sheet item		CCF
(a)	Unrated eligible liquidity facilities	50%
(b)	Eligible Servicer cash advance facilities	0%
(c)	Others	100%

- (2) An Authorised Person must notify the Regulator if it intends to provide eligible Servicer cash advance facilities and when there is a drawdown.

### Guidance

Eligible Servicer cash advance facilities refers to undrawn Servicer cash advances or facilities that are contractually provided for and unconditionally cancellable without prior notice, so long as the Servicer is entitled to full reimbursement and this right is senior to other claims on cash flows from the underlying Exposures.

## A4.3 Collateral calculations and haircuts

### Core market participants

- A4.3.1** For the purposes of this Section, "core market participant" means:

- (a) any central government or central bank;
- (b) any PSE;
- (c) any qualifying MDB;
- (d) any banking institution or Securities firm;
- (e) any Financial Institution eligible for a 20% risk weight under Section 4.12;
- (f) any central counterparty;

- (g) any regulated mutual fund that is subject to capital or leverage requirements; or
- (h) any regulated pension fund.

**Calculation of  $E^*$  for collateralised transactions other than OTC Derivative transactions and long settlement transactions**

- A4.3.2** An Authorised Person using the FCCA to calculate  $E^*$  must adjust both the amount of the Exposure to the Counterparty and the value of any Collateral received in support of that Counterparty to take into account possible future fluctuations in the value of either due to market movements, by using the methods and haircuts set out in Rules A4.3.6 to A4.3.29.
- A4.3.3** An Authorised Person must calculate the appropriate haircuts to be applied using one of the following methods:
- (a) standard supervisory haircuts; or
  - (b) own-estimate haircuts.
- A4.3.4** [Reserved]
- A4.3.5** (1) As an alternative to the use of standard supervisory haircuts or own-estimate haircuts, an Authorised Person may, subject to approval by the Regulator, use VaR models to reflect the price volatility of the Exposure and Collateral for SFTs which are covered by a qualifying bilateral Netting agreement. The requirements relating to the use of this approach are set out in Section A4.5.
- (2) An Authorised Person may seek the approval from the Regulator referred to in (1) only if it has already received approval from the Regulator to use the internal models approach for calculating the Market Risk Capital Requirement.

**Guidance**

Approval for the use of the internal model approach is governed by Section 5.11 of Chapter 5 (Market Risk).

- A4.3.6** An Authorised Person using standard supervisory haircuts or own-estimate haircuts under the FCCA must calculate  $E^*$  for any collateralised transaction not covered by a qualifying bilateral Netting agreement or a qualifying cross-product Netting agreement other than OTC Derivative transactions or long settlement transactions, using the following formula:

$$E^* = \max \{0, [E(1 + H_E) - C(1 - H_C - H_{FX})]\}$$

where:

- $E^*$  = Exposure value after risk mitigation;
- $E$  = fair value of the Exposure calculated in accordance with Section 4.9;
- $H_E$  = haircut appropriate to the Exposure;

$C$	=	fair value of the eligible financial Collateral received;
$H_C$	=	haircut appropriate to the Collateral, or if the Collateral is a basket of assets, the weighted sum of the haircuts appropriate to the assets in the basket where each weight is the proportion of the asset in the basket in units of currency; and
$H_{FX}$	=	haircut appropriate for currency mismatch between the Collateral and Exposure.

### Guidance

Where the residual maturity of the Collateral is shorter than the residual maturity of the Exposure, the Authorised Person must substitute PA calculated in accordance with Rules 4.13.14 to 4.13.16 for  $C(1 - H_C - H_{FX})$ .

- A4.3.7** An Authorised Person using standard supervisory haircuts or own-estimate haircuts under the FCCA must calculate  $E^*$  for any collateralised transaction covered by a qualifying bilateral Netting agreement or qualifying cross-product Netting agreement other than OTC Derivative transactions or long settlement transactions, using the following formula:

$$E^* = \text{Max} \{0, [\sum (E) - \sum (C) + \text{add-on}]\}$$

where:

$E^*$	=	Exposure value after risk mitigation;
$E$	=	fair value of the Exposure calculated in accordance with Section 4.9 of these Rules;
$C$	=	fair value of eligible financial Collateral received; and
<i>add-on</i>	=	the add-on amount to reflect the market price volatility and foreign exchange volatility, calculated in accordance with Rule A4.3.8 below.

- A4.3.8** An Authorised Person must calculate the add-on using one of the following approaches:

(a) the approach according to the following formula:

$$\text{add-on} = \sum (E_S \cdot H_S) + \sum (E_{FX} \cdot H_{FX})$$

where:

$E_S$	=	absolute value of the net position in a given Security;
$H_S$	=	haircut appropriate to $E_S$
$E_{FX}$	=	absolute value of the net position in a currency different from the settlement currency; and
$H_{FX}$	=	haircut appropriate for currency mismatch between the Collateral and Exposure;

or

- (b) the approach using VaR models, provided the Authorised Person has received approval from the Regulator as referred to in Rule A4.3.5.

### Guidance

Approval for the use of the internal model approach is governed by Section 5.11 of Chapter 5.

- A4.3.9** Subject to Rules A4.3.10 to A4.3.12, an Authorised Person must determine  $H_E$ ,  $H_C$ ,  $H_S$  and  $H_{FX}$  referred to in Rules A4.3.6 to A4.3.8, in accordance with the standard supervisory haircuts in the table forming part of Rule A4.3.13.
- A4.3.10** An Authorised Person may calculate  $H_E$ ,  $H_C$ ,  $H_S$  and  $H_{FX}$  using own-estimate haircuts in accordance with Rules A4.3.17 to A4.3.23 if it has received approval from the Regulator to use the internal models approach for calculating the Market Risk Capital Requirement. If the Authorised Person chooses to use own-estimate haircuts, it must do so consistently for determining haircuts for all eligible financial Collateral and all portfolios, except that it may, with the approval of the Regulator, use the standard supervisory haircuts in Rules A4.3.13 to A4.3.16 for any portfolio which is immaterial in size and risk profile.
- A4.3.11** An Authorised Person may apply a value of zero to  $H_E$ ,  $H_C$  and  $H_S$  in the case of a qualifying SFT with a core market participant. This approach is not available to an Authorised Person using VaR models in accordance with Section A4.5 to calculate  $E^*$ .
- A4.3.12** An Authorised Person may apply a value of zero to  $H_E$ ,  $H_C$  and  $H_S$  in the case of an SFT where both the Exposure and Collateral are Securities issued by central governments where a value of zero has been prescribed by the banking regulator of that jurisdiction and Exposures to the central government of that jurisdiction have a Credit Quality Grade of 1 as set out in the table in Rule 4.12.4.

### Standard supervisory haircuts

- A4.3.13** The standard supervisory haircuts,  $H_E$ ,  $H_C$  and  $H_S$ , referred in Rules A4.3.6 to A4.3.8 (assuming daily remargining, daily revaluation and a ten-business day holding period), are subject to Rule A4.3.14, as follows:

Debt security: Credit Quality Grade of issue – long-term	Residual Maturity	Standard Supervisory Haircut (%)	
		Issuer	
		Central government or central bank	Other
1	≤ 1 year	0.5	1
	> 1 year and ≤ 5 years	2	4
	> 5 years	4	8
2 or 3, and unrated bank securities as defined in Rule 4.13.5(d)	≤ 1 year	1	2
	> 1 year and ≤ 5 years	3	6
	> 5 years	6	12
4	All	15	n/a



Debt security: Credit Quality Grade of issue – short-term	Standard Supervisory Haircut (%)	
	Issuer	
	Central government or central bank	Other
I	0.5	1
II or III, and unrated bank securities as defined in Rule 4.13.5(d)	1	2

Other collateral or exposure type	Standard Supervisory Haircut (%)
Gold	15
Any equity (including a convertible bond) included in a main index	15
Any equity (including a convertible bond) traded on a regulated exchange	25
Any unit in a Collective Investment Fund	Highest haircut applicable to any Security in which the Fund can invest
Cash in the same currency as the underlying exposure	0
Instruments in the Trading Book other than those listed (for pre-settlement Counterparty Exposures arising from SFTs included in the Trading Book).	25

### Guidance

1. The Credit Quality Grade for a debt security is that associated specifically with that debt security issue.
2. PSEs and MDBs should be treated as equivalent to central governments for the purpose of this table.

**A4.3.14** The standard supervisory haircut,  $H_E$ , for transactions in which an Authorised Person lends instruments that do not qualify as eligible financial Collateral (e.g. corporate debt Securities with a Credit Quality Grade of 4 or worse) is 25%.

**A4.3.15** The standard supervisory haircut,  $H_{FX}$ , for currency mismatch where Exposure and Collateral are denominated in different currencies based on a ten-business day holding period and daily revaluation is 8%.

**A4.3.16** Where the minimum holding period, frequency of remargining or revaluation assumptions set out for eligible financial Collateral in Rule A4.3.13 differ from those of the Authorised Person, the Authorised Person must adjust  $H_E$ ,  $H_C$  and  $H_S$  using the formulae in Rules A4.3.25 to A4.3.26.

### Own-estimate haircuts

- A4.3.17** (1) An Authorised Person must apply for approval from the Regulator if it intends to use own-estimate haircuts.
- (2) An Authorised Person must not use own-estimate haircuts unless it has received approval to adopt the internal models approach to calculate the Market Risk Capital Requirement.

- (3) The Regulator may grant approval for an Authorised Person to use own-estimate haircuts subject to such conditions or restrictions as the Regulator may impose.

**A4.3.18** If an Authorised Person becomes aware after it has received approval to use own-estimate haircuts that it no longer complies with any of the requirements in Rules A4.3.17 to A4.3.23 or any of the conditions or restrictions imposed by the Regulator pursuant to Rule A4.3.17 or no longer meets the Rules, it must

- (a) inform the Regulator as soon as practicable;
- (b) assess the effect of the situation in terms of the risk posed to the Authorised Person;
- (c) prepare a plan to rectify the situation and inform the Regulator of its plan as soon as practicable; and
- (d) undertake prompt corrective action within a reasonable time in accordance with the plan prepared pursuant to (c).

**A4.3.19** If an Authorised Person fails to comply with Rule A4.3.18, the Regulator may revoke its approval for the Authorised Person to use own-estimate haircuts. The Authorised Person may also be required to revise its estimates for the purpose of calculating regulatory Capital Requirements if its estimates of  $E^*$ , does not adequately reflect its Exposure to Counterparty Credit Risk.

#### **Requirements for use of own-estimate haircuts**

**A4.3.20** An Authorised Person using own-estimate haircuts must estimate the volatility for each individual instrument that is taken as eligible financial Collateral. In estimating such volatility, the Authorised Person must not take into account the correlations between unsecured Exposures, Collateral and exchange rates. Where there are Maturity Mismatches, the Authorised Person must apply Rules 4.13.14 to 4.13.16.

**A4.3.21** An Authorised Person must ensure that the model used to estimate volatilities captures all the material risks run by it.

**A4.3.22** In calculating the haircuts using internal estimates of volatilities, an Authorised Person must:

- (a) use a 99th percentile, one-tailed confidence interval;
- (b) use the minimum holding period and remargining or revaluation conditions according to the type of transaction as set out in Rules A4.3.24 to A4.3.26. Where the minimum holding period, remargining or revaluation conditions used by an Authorised Person differ from those set out above, it must adjust the haircuts using the formulae in Rules A4.3.25 to A4.3.26;
- (c) use a historical observation period (i.e. sample period) of at least one year.

Where the Authorised Person uses a weighting scheme or other methods for the historical observation period, the "effective" observation period must be at least one year (i.e. the weighted average time lag of the individual observations must not be less than six months);

- (d) update its data sets at least once every three months and recalculate haircuts at least once every three months. The Regulator may require more

frequent updates whenever there is an increase in volatility in market prices of the Collateral; and

- (e) use the estimated volatility data in the day-to-day risk management process of the Authorised Person and if the Authorised Person is using a longer holding period for risk management compared to the ones prescribed in Rules A4.3.24 to A4.3.26., then the longer holding period must also be applied for the calculation of haircuts.

### Guidance

1. An Authorised Person should:
  - a. take into account the illiquidity of lower quality Collateral and should adjust the holding period upwards in cases where such a holding period would be inappropriate given the liquidity of the Collateral; and
  - b. identify where historical data may understate potential volatility (e.g. a pegged currency);and deal with such cases by subjecting the data to stress testing.
2. An Authorised Person, when considering the market liquidity of a Collateral, should consider four dimensions:
  - a. immediacy, which refers to the speed with which a trade of a given size at a given cost is completed;
  - b. depth, which refers to the maximum size of a trade for any given bid-ask spread;
  - c. tightness, which refers to the difference between buy and sell prices; and
  - d. resiliency, which refers to how quickly prices revert to original or fundamental levels after a large transaction.
3. The Authorised Person should have experienced Persons familiar with the relevant market for the Collateral to judge the market liquidity of the Collateral and determine if the minimum holding period is sufficient for any given Collateral. The holding period should be deemed to be insufficient if the value of the Collateral would move by more than 1% should the Collateral be liquidated within the minimum holding period in these Rules, taking into account the immediacy, depth, tightness and resiliency of the market. In such a situation, the holding period should be adjusted upwards, such that the Collateral can be safely liquidated within the period, without causing a price movement of more than 1% relative to the value after the haircut.
4. An Authorised Person should aim to update its data sets daily in line with industry practice. If the Authorised Person updates its data sets less than once every three months, it should be able to demonstrate to the Regulator that the volatilities of the market prices are stable. In addition, where the updating of data sets is less frequent, the Regulator will normally expect compensating controls in the form of stress testing.

**A4.3.23** An Authorised Person must have robust and effective processes in place for ensuring compliance with documented internal policies, controls and procedures concerning the operation of the risk measurement system to support the use of own-estimate haircuts.

#### Guidance

In order to demonstrate compliance with Rule A4.3.23, an Authorised Person should give due regard to the following expectations of the Regulator:

- (a) the risk measurement system should be used in conjunction with internal Exposure limits;
- (b) the risk management processes of an Authorised Person relating to the use of own-estimate haircuts should be subject to internal audit at least once a year, covering the following areas:
  - (i) the integration of risk measures into daily risk management;
  - (ii) the validation of any significant change in the risk management process;
  - (iii) the accuracy and completeness of position data;
  - (iv) the verification of the consistency, timeliness and reliability of data sources used to run internal models, including the independence of such data sources; and
  - (v) the accuracy and appropriateness of volatility assumptions.
- (c) such internal audits referred to in (b) are not to be confused with an internal validation of the risk management systems surrounding the use of own-estimate haircuts. All significant risk models employed to support the use of own-estimate haircuts should be validated at least once a year. The internal audits serve as an independent process check to help ensure that the validation is sufficiently robust and effective.

#### Minimum holding periods, remargining or revaluation conditions

**A4.3.24** The following table sets out the minimum holding periods and remargining or revaluation conditions for different types of transactions where an Authorised Person uses own-estimate haircuts:

Transaction type	Minimum holding period	Remargining/ Revaluation Condition
Repos, reverse repos, Securities or commodities lending or Securities or commodities borrowing transactions	Five business days	daily remargining

Transaction type	Minimum holding period	Remargining/ Revaluation Condition
OTC Derivative transactions and margin lending transactions	Ten business days	daily remargining
Exposures secured by eligible financial Collateral	Twenty business days	daily revaluation

**A4.3.25** Where the assumed minimum holding period is not met or remargining or revaluation conditions are not fulfilled, an Authorised Person must calculate the applicable haircut using the following formula:

$$H = H_M \sqrt{\{[N_R + (T_M - 1)] / T_M\}}$$

where -

"H" refers to the haircut;

"H<sub>M</sub>" refers to the haircut under the minimum holding period;

"T<sub>M</sub>" refers to the minimum holding period for the type of transaction or eligible financial Collateral; and

"N<sub>R</sub>" refers to the actual number of business days between remargining or revaluation, as the case may be.

**A4.3.26** When an Authorised Person uses a holding period, T<sub>N</sub>, which is different from the specified minimum holding period, T<sub>M</sub>, the Authorised Person must calculate H<sub>M</sub> using the following formula:

$$H_M = H_N \sqrt{(T_M / T_N)}$$

where -

"T<sub>N</sub>" refers to the holding period used by the Authorised Person for deriving H<sub>N</sub>; and

"H<sub>N</sub>" refers to the haircut based on the holding period T<sub>N</sub>.

### Recognition of eligible financial Collateral under FCSA

**A4.3.27** Subject to A4.3.28, an Authorised Person which has taken eligible financial Collateral for a CR Exposure and is using the FCSA may recognise the effects of CRM of the eligible financial Collateral as follows:

- (a) break down the Exposure into -
  - (i) a collateralised portion with E equal to the latest fair value of the eligible financial Collateral; and
  - (ii) an uncollateralised portion with E equal to the E of the CR Exposure less the latest fair value of the eligible financial Collateral;

and

- (b) for the purposes of calculating the Credit RWA amount pursuant to Rule 4.8.3, use:
  - (i) for the collateralised portion, the CRW that is applicable to the eligible financial Collateral as though the Authorised Person had a direct Exposure to that Collateral; and
  - (ii) for the uncollateralised portion, the CRW that is applicable to the obligor.

**A4.3.28** If the CRW determined in accordance with A4.3.27(b)(i) is less than 20%, an Authorised Person must apply a CRW of 20% to the collateralised portion of the CR Exposure, except in the following cases:

- (a) a qualifying SFT where the Counterparty in the transaction is a core market participant, in which case the Authorised Person may apply a risk weight of 0%;
- (b) a qualifying SFT where the Counterparty in the transaction is not a core market participant, in which case the Authorised Person may apply a risk weight of 10%;
- (c) an OTC Derivative transaction subject to daily mark-to-market that is collateralised by cash, and where there is no currency mismatch, in which case the Authorised Person may apply a risk weight of 0%;
- (d) an OTC Derivative transaction subject to daily mark-to-market that is collateralised by Exposures to central governments, central banks or PSE or a combination thereof qualifying for a 0% risk weight in accordance with the Rules in Chapter 4, and where there is no currency mismatch, in which case the Authorised Person may apply a risk weight of 10%; and
- (e) a transaction where there is no currency mismatch and the Collateral comprises -
  - (i) cash on Deposit as set out in Rule 4.13.5(a); or
  - (ii) Exposures in the central government and central bank asset class or in the PSE asset class or a combination thereof qualifying for a 0% risk weight under the Rules in Section 4.12, and the latest fair value of such Collateral has been discounted by 20% for the purposes of determining the value of the collateralised portion of the CR Exposure in accordance with Rule A4.3.27(a)(i), in which case the Authorised Person may apply a CRW of 0%.

**A4.3.29** An Authorised Person which is using FCSA must not recognise the effects of CRM of any Collateral with a Maturity Mismatch.

#### **A4.4 Qualifying Securities Financing Transactions (SFTs)**

**A4.4.1** A qualifying SFT must comply with the following requirements:

- (a) both the Exposure and the Collateral are cash, or a Security issued by a central government or central bank qualifying for a 0% risk weight under the Rules in Section 4.12;

- (b) both the Exposure and the Collateral are denominated in the same currency;
- (c) either the transaction is overnight or both the Exposure and the Collateral are marked-to-market daily and are subject to daily remargining;
- (d) following a Counterparty's failure to remargin, the time that is required between the last mark-to-market before the failure to remargin and the liquidation of the Collateral is considered to be no more than four business days;
- (e) the transaction is settled across a recognised settlement system for that type of transaction;
- (f) the documentation covering the agreement is standard market documentation for repos, reverse repos, Securities, lending transactions or Securities borrowing transactions in the Securities concerned;
- (g) the transaction is governed by documentation specifying that if the Counterparty fails to satisfy an obligation to deliver cash or Securities or to deliver margin, or otherwise defaults, then the transaction may be terminated immediately; and
- (h) upon any event of default, regardless of whether the Counterparty is insolvent or bankrupt, the Authorised Person has the unfettered, legally enforceable right to immediately seize and liquidate the Collateral for the benefit of the Authorised Person.

#### **A4.5 Requirements for use of VaR models**

##### **A4.5.1** An Authorised Person using VaR models must:

- (a) use a minimum holding period of ten business days except in the case of an SFT, for which it must use a minimum holding period of five business days;
- (b) backtest its output by:
  - (i) identifying a sample of twenty Counterparties, on an annual basis, which must include the ten largest Counterparties as determined by the Authorised Person according to its own Exposure measurement approach and ten others selected at random;
  - (ii) comparing, for each day and for the sample of twenty Counterparties, the VaR estimate of the previous day for the Counterparty portfolio to the difference between the net value of the previous day's portfolio using today's market prices and the net value of that portfolio using the previous day's market prices; and
  - (iii) counting it as an exception, where this difference exceeds the previous day's VaR estimate.

#### **Guidance**

An Authorised Person should adjust the minimum holding period upwards for any Financial Instrument where the specified holding period would be inappropriate given the liquidity of the instrument concerned. When the outcome of the model



consistently results in a large number of exceptions, either overall or for one significant Counterparty, the Authorised Person is expected to review the model assumptions and make modifications as appropriate.

#### **A4.6 Credit RWA - Unsettled Transactions, free deliveries, Derivatives and long settlement transactions**

##### **Guidance**

1. Where settlement does not occur on the due date and neither party has released the relevant cash or Securities, an Authorised Person 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 Person also faces a Credit Risk Exposure for the Unsettled Transaction, for which the Authorised Person is required to hold regulatory capital. The relevant Credit Risk Exposure should be included in the calculation of Credit RWA for the Authorised Person.
2. An Authorised Person 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 Person must calculate the Credit Risk RWA for the free delivery transaction.
3. For Derivatives (OTC and exchange-traded) and long settlement transactions, an Authorised Person is exposed to settlement risk. For Derivatives Contracts, the risk is that the price moves in an Authorised Person's favour so that it makes a book profit but at maturity the Authorised Person cannot realise that profit because the other party defaults.
4. In cases of a system-wide failure of a settlement or clearing system, an Authorised Person need not calculate CRCOM on transactions remaining unsettled till the settlement or clearing system is brought back to normal operations.

**A4.6.1** The Section applies in respect of items in both the Trading Book and Non-Trading Book.

**A4.6.2** CRWs must be calculated on the Counterparty to the transaction, not on the Issuer of the Security.

**A4.6.3** When calculating its Credit RWA, an Authorised Person must not include RWA arising from a transaction if it is a negative amount.

**A4.6.4** CRW is applied in accordance with Section A4.3 except that the maximum counterparty weighting for an OTC Derivative is 50%.

##### **Unsettled Transactions**

**A4.6.5** An Authorised Person must calculate the Credit RWA for transactions in which debt instruments, equities, foreign currencies and commodities (excluding repos, reverse repos and Securities or commodities lending/borrowing) remain unsettled after their due delivery dates, using the following formula:

Credit RWA = E 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 Credit RWA on Unsettled Transactions
0-4	0%
5-15	100%
16-30	500%
31-45	750%
46 or more	1000%

**A4.6.6** If assets involved in the transaction are to be received by the Authorised Person and the transaction remains unsettled:

$$E = \max (MV-CV, 0)$$

where MV is the market value of the assets and CV represents the contracted value for delivery of the assets.

**A4.6.7** If assets involved in the transaction are to be delivered by the Authorised Person and the transaction remains unsettled:

$$E = \max (CV-MV, 0).$$

### Guidance

E is the price difference to which the Authorised Person is exposed, being the difference between the agreed settlement price for the debt instrument, equity, foreign currency or commodity in question and its current market value, where the difference could involve a loss for the firm.

### Free delivery transactions

**A4.6.8** An Authorised Person must calculate the Credit RWA in accordance with the table in Rule A4.6.11 for free delivery transactions in both the Trading and Non-Trading Book where it has:

- (a) delivered Securities or commodities before receiving payment;
- (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.

**A4.6.9** If the settlement of the transaction is to be effected across a national border, Credit RWA needs to be calculated only when more than one business day has elapsed since the firm has made the relevant payment or delivery.

## Guidance

In respect of free delivery transactions referred to in Rule A4.6.9, if the dates when two payment legs are made are the same according to the time zones where each payment is made, they are deemed to have been settled on the same day.

**A4.6.10** For a free delivery transaction an Authorised Person must determine its exposure E after the end of the first contractual payment or delivery date as follows:

- (a) if an Authorised Person has delivered Securities or Commodities or foreign exchange funds to a Counterparty and has not received payment:

$$E = CV \text{ due to the Authorised Person}$$

- (b) if an Authorised Person has made payment of CV to a Counterparty for commodities or Securities and has not received them:

$$E = CV - MV \text{ of the Securities, commodities or foreign exchange funds due to it}$$

**A4.6.11** The Credit RWA in respect of free delivery transactions are to be calculated in accordance with the following table:

Transaction stage	Treatment
Up to first contractual payment or delivery leg	No calculation required
From first contractual payment or delivery leg up to four business days after second contractual payment or delivery leg	Treat as an exposure
From five business days post contractual payment or delivery leg until extinction of the transaction	Treat as an exposure with a risk-weight of 1000%

**A4.6.12** An Authorised Person must treat an Exposure in accordance with the relevant provisions of Chapter 4.

**A4.6.13** If the Authorised Person considers the total amount of the exposures resulting from free delivery transactions to be immaterial it may apply a risk weight of 100% to these exposures, except where a risk weight of 1000% is applied in accordance with Rule A4.6.11.

## Derivatives and long settlement transactions – Standardised Approach to Counterparty Credit Risk (SA-CCR)

**A4.6.14** The exposure at default (EAD) of Derivative transactions (OTC and exchange-traded) and long settlement transactions must be calculated in accordance with this Section unless the Authorised Person has been granted permission by the Regulator to use an internal model.

**A4.6.15** EAD is to be calculated separately for each netting set. It is determined as follows:

$$EAD = \alpha^* (RC + PFE)$$

where:

$$\alpha = 1.4$$

RC = the replacement cost calculated according to Rules A4.6.19 to A4.6.24

*PFE* = the amount for potential future exposure calculated according to Rule A4.6.26

**A4.6.16** The replacement cost (RC) and the potential future exposure (PFE) components must be calculated differently for margined and unmargined netting sets. The EAD for a margined netting set is to be capped at the EAD of the same netting set calculated on an unmargined basis.

### Netting Sets

**A4.6.17** An Authorised Person may net transactions subject to any legally valid form of bilateral netting which results in legal substitution of one single payable/receivable amount for previous gross obligations.

**A4.6.18** In every case in which netting is applied, the Authorised Person must demonstrate to the Regulator that it has the following in place:

- (a) A netting contract with the counterparty or other agreement which creates a single legal obligation, covering all included transactions, such that the Authorised Person would have either a claim to receive or obligation to pay only the net sum of the positive and negative mark-to-market values of included individual transactions in the event a counterparty fails to perform due to any of the following:
  - (i) default,
  - (ii) bankruptcy,
  - (iii) liquidation, or
  - (iv) similar circumstances.
- (b) Written and reasoned legal reviews that, in the event of a legal challenge, the relevant courts and administrative authorities would find the exposure of the Authorised Person to be such a net amount under:
  - (i) The law of the jurisdiction in which the counterparty is chartered and, if the foreign branch of a counterparty is involved, then also under the law of the jurisdiction in which the branch is located;
  - (ii) The law that governs the individual transactions; and
  - (iii) The law that governs any contract or agreement necessary to effect the netting.
- (c) Procedures to ensure that the legal characteristics of netting arrangements are kept under review in light of the possible changes in relevant law.

### Calculation of RC for unmargined transactions

**A4.6.19** An unmargined transaction is a transaction in which variation margin is not exchanged. Collateral other than variation margin may be present.

**A4.6.20** RC for unmargined transactions is calculated in accordance with the following formula:

$$RC = \max\{V - C; 0\}$$

where:

$V$  = the value of the derivative transactions in the netting set (constituted in accordance with Rule A4.6.18); and

$C$  = the haircut value of the net collateral held, calculated in accordance with Section A4.3.

- A4.6.21** Derivative contracts with a one-way margining agreement in favour of the Authorised Person's counterparty must be treated as unmarginated transactions.

#### **Net Independent Collateral Amount**

- A4.6.22** The independent collateral amount ( $ICA$ ) is (i) collateral (other than variation margin) posted by the counterparty that is available to the Authorised Person on default of the counterparty; and/or (ii) the Independent Amount parameter as defined in standard industry documentation.

- A4.6.23** The net independent collateral amount ( $NICA$ ) is any  $ICA$  posted by the counterparty less unsegregated collateral posted by the Authorised Person.

#### **Calculation of RC for margined transactions**

- A4.6.24**  $RC$  for margined transactions is calculated in accordance with the following formula:

$$RC = \max\{V - C; TH + MTA - NICA; 0\}$$

where:

$V$  = the value of the derivative transactions in the netting set (constituted in accordance with Rule A4.6.18);

$C$  = the haircut value of the net collateral held, calculated in accordance with Section A4.3;

$TH$  = the positive threshold before the counterparty is required to send the Authorised Person collateral;

$MTA$  = the minimum transfer amount applicable to the counterparty;

$NICA$  = the net independent collateral amount.

#### **Guidance**

$(TH + MTA - NICA)$  represents the largest exposure that would not trigger a variation margin call. For example, without initial margin, the greatest exposure that would not trigger a variation call is the threshold plus any minimum transfer amount.

#### **Potential Future Exposure**

- A4.6.25** The PFE consists of (i) an aggregate add-on component, which consists of add-ons calculated for each asset class and (ii) a multiplier that allows for the recognition of excess collateral or negative mark-to-market value for the transactions.

- A4.6.26** PFE is calculated as follows:

$$PFE = multiplier * AddOn^{aggregate}$$

where:

$AddOn^{aggregate}$  = the aggregate add-on component; and

$multiplier$  = a function of three inputs ( $V$ ,  $C$  and  $AddOn^{aggregate}$ ), calculated in accordance with Rule A4.6.27.

**A4.6.27** The  $multiplier$  input is calculated in accordance with the following formula:

$$multiplier = \min \left\{ 1; Floor + (1 - Floor) * \exp \left( \frac{V - C}{2 * (1 - Floor) * AddOn^{aggregate}} \right) \right\}$$

where:

$\exp(\dots)$  = the exponential function;

$Floor$  = 5%;

$V$  = the value of the derivative transactions in the netting set; and

$C$  = the haircut value of the net collateral held, calculated in accordance with Section A4.3.

#### General steps for calculating the add-on

**A4.6.28** For each transaction, the Authorised Person must identify the primary risk factor or factors and attribute the transaction to one or more of the five asset classes: interest rate, foreign exchange, credit, equity or commodity.

**A4.6.29** The Authorised Person must determine the add-on for each asset class in accordance with the asset-class-specific formulae set out in A4.6.35 – A4.6.58.

#### Guidance

Most derivative transactions have one primary risk driver, defined by the reference underlying instrument (e.g. an interest rate curve for an interest rate swap, a reference entity for a credit default swap, a foreign exchange rate for an FX call option etc.).

#### Formulae and parameters common to all asset classes

**A4.6.30** The following formulae and adjustments are used in the determination of the add-ons for all asset classes.

#### Supervisory delta adjustment: $\delta_i$

**A4.6.31** The Authorised Person must include the following supervisory delta adjustments in the calculation of the relevant add-on where relevant.

$\delta_i$	Long in the primary risk factor	Short in the primary risk factor
Instruments that are not options or CDO tranches	+1	-1

$\delta_i$	Bought	Sold
Call options	$+\Phi\left(\frac{\ln(P_i/K_i) + 0.5*\sigma_i^2 * T_i}{\sigma_i * \sqrt{T_i}}\right)$	$-\Phi\left(\frac{\ln(P_i/K_i) + 0.5*\sigma_i^2 * T_i}{\sigma_i * \sqrt{T_i}}\right)$
Put options	$-\Phi\left(-\frac{\ln(P_i/K_i) + 0.5*\sigma_i^2 * T_i}{\sigma_i * \sqrt{T_i}}\right)$	$+\Phi\left(-\frac{\ln(P_i/K_i) + 0.5*\sigma_i^2 * T_i}{\sigma_i * \sqrt{T_i}}\right)$
<p>With the following parameters:</p> <p><math>P_i</math> = underlying price (spot, forward, average etc.)</p> <p><math>K_i</math> = strike price</p> <p><math>T_i</math> = latest contractual exercise date of the option</p> <p>The supervisory volatility <math>\sigma_i</math> of an option is specified on the basis of the supervisory factor applicable to the trade in accordance with the table set out in A4.6.34.</p>		

$\delta_i$	Purchased (long protection)	Sold (short protection)
CDO tranches	$+\frac{15}{(1 + 14*A_i) * (1 + 14*D_i)}$	$-\frac{15}{(1 + 14*A_i) * (1 + 14*D_i)}$
<p>With the following parameters:</p> <p><math>A_i</math> = attachment point of the CDO tranche</p> <p><math>D_i</math> = detachment point of the CDO tranche</p>		

## Guidance

"Long in the primary risk factor" means that the market value of the instrument increases, whereas "short in the primary risk factor" means that the market value of the instrument decreases when the value of the primary risk factor increases. The symbol  $\Phi$  in these equations represents the standard normal cumulative distribution function.

## Time risk horizons – unmargined transactions

**A4.6.32** The Authorised Person must calculate the maturity factor ( $MF_i$ ) of unmargined transactions in accordance with the following formula:

$$MF_i^{(unmargined)} = \sqrt{\frac{\min(M_i; 1 \text{ year})}{1 \text{ year}}}$$

where  $M_i$  is the remaining maturity of the transaction, floored at ten business days.



## Guidance

The formula requires that the minimum time risk horizon for unmargined transactions is the lesser of one year and the remaining maturity of the derivative contract, floored at ten business days.

## Time risk horizons – margined transactions

**A4.6.33** The Authorised Person must calculate the  $MF_i$  of margined transactions in accordance with the following formula:

$$MF_i^{(margined)} = \frac{3}{2} \sqrt{\frac{MPOR_i}{1 \text{ year}}}$$

The appropriate margin period of risk ( $MPOR_i$ ) is determined in accordance with the following table:

Transaction Type	Minimum Margin Period of Risk ( $MPOR_i$ )
Non-centrally-cleared derivative transactions subject to daily margin agreements	Ten business days
Centrally cleared derivative transactions subject to daily margin agreements	Five business days
Netting sets consisting of 5,000 or more transactions that are not with a central counterparty	Twenty business days
Netting sets with outstanding disputes	Double the $MPOR_i$ for the relevant category of transaction

## Supervisory factors, correlation and supervisory option volatilities

**A4.6.34** Supervisory factors are specific to each asset class. The Authorised Person must refer to the table below to determine the supervisory factor relevant to their determination of the add-on for their particular asset class in accordance with the asset-class-specific formulae set out in Rules A4.6.35 to A4.6.58.

Asset Class	Subclass	Supervisory factor $SF$ (%)	Correlation $\rho$ (%)	Supervisory option volatility $\sigma$ (%)
Interest rate		0.50	n/a	50
Foreign exchange		4.0	n/a	15

Asset Class	Subclass	Supervisory factor $SF$ (%)	Correlation $\rho$ (%)	Supervisory option volatility $\sigma$ (%)
Credit, single name (where CQG represents Credit Quality Grade)	CQG 1	0.38	50	100
	CQG 2	0.42	50	100
	CQG 3	0.54	50	100
	CQG 4	1.06	50	100
	CQG 5	1.6	50	100
	CQG 6	6.0	50	100
Credit, index	Investment Grade	0.38	80	80
	Non-Investment Grade	1.06	80	80
Equity, single name		32	50	120
Equity, index		20	80	75
Commodity	Electricity	40	40	150
	Oil/Gas	18	40	70
	Metals	18	40	70
	Agricultural	18	40	70
	Other	18	40	70

#### Trade level adjusted notional – interest rate ( $d_i^{(IR)}$ ) and credit derivatives ( $d_i^{(Credit)}$ )

**A4.6.35** For interest rate and credit derivatives, the trade-level adjusted notional is the product of the trade notional amount, converted to the domestic currency, and the supervisory duration ( $SD_i$ ):

$$\text{Trade-level adjusted notional} = \text{Trade notional amount} * SD_i$$

**A4.6.36**  $SD_i$  is determined in accordance with the following formula:

$$SD_i = \frac{\exp(-0.05 * S_i) - \exp(-0.05 * E_i)}{0.05}$$

where  $S_i$  and  $E_i$  are the start and end dates, respectively, of the time period referenced by the interest rate or credit derivative, floored by ten business days.

### Add-on for interest rate derivatives

**A4.6.37** The add-on for interest rate derivatives is the sum of the add-ons for each hedging set of interest rate derivatives transacted with a counterparty in a netting set.

**A4.6.38** Interest rate derivatives consist of a separate hedging set for each currency. Interest rate derivatives are divided into three time 'buckets' as follows: less than or equal to one year, greater than one year and less than or equal to five years, and more than five years.

**A4.6.39** The add-on for a hedging set of interest rate derivatives is calculated in two steps:

#### Step 1

**A4.6.40** The effective notional is calculated in accordance with the following formula:

$$D_{jk}^{(IR)} = \sum_{i \in (Ccy_j, MB_k)} \delta_i * d_i^{(IR)} * MF_i^{(type)}$$

where:

$i \in (Ccy_j, MB_k)$  refers to trades of currency  $j$  that belong to maturity bucket  $k$ .

### Guidance

The effect of this formula is that the effective notional for each time bucket and currency is the sum of the trade-level adjusted notional amounts multiplied by the supervisory delta adjustments and the maturity factor.

#### Step 2

**A4.6.41** The Authorised Person must aggregate across maturity buckets for each hedging set in accordance with the following formula:

$$\begin{aligned} \text{EffectiveNotional}_j^{(IR)} &= \sqrt{(D_{j1}^{(IR)})^2 + (D_{j2}^{(IR)})^2 + (D_{j3}^{(IR)})^2 + 1.4 * D_{j1}^{(IR)} * D_{j2}^{(IR)} + 1.4} \\ &\quad * D_{j2}^{(IR)} * D_{j3}^{(IR)} + 0.6 * D_{j1}^{(IR)} * D_{j3}^{(IR)} \sqrt{\frac{1}{2}}} \end{aligned}$$

**A4.6.42** The Authorised Person must then determine the hedging set level add-on in accordance with the following formula:

$$\text{AddOn}_j^{(IR)} = SF_j^{(IR)} * \text{EffectiveNotional}_j^{(IR)}$$

**A4.6.43** The Authorised Person must then aggregate the interest rate derivative add-on across hedging sets by simple summation, as follows:

$$AddOn^{(IR)} = \sum_j AddOn_j^{(IR)}$$

### Add-on for credit derivatives

- A4.6.44** All credit derivatives referencing the same entity may be offset fully to form an entity-level effective notional amount:

$$EffectiveNotional_k^{(Credit)} = \sum_{i \in Entity_k} \delta_i * d_i^{(Credit)} * MF_i^{(type)}$$

where  $i \in Entity_k$  refers to trades of  $Entity_k$ .

### Guidance

The effect of this formula is that the effective notional for each entity is the sum of the trade-level adjusted notional amounts multiplied by the supervisory delta adjustments and the maturity factor.

- A4.6.45** The add-on for all positions referencing the entity is determined in accordance with the following formula:

$$AddOn(Entity_k) = SF_k^{(Credit)} * EffectiveNotional_k^{(Credit)}$$

where  $SF_k$  is the supervisory factor for the credit asset class, determined in accordance with the table set out in A4.6.36.

- A4.6.46** The cumulative add-on for the credit derivatives hedging set is determined in accordance with the following formula:

$$AddOn^{(Credit)} = \left[ \left( \sum_k \rho_k^{(Credit)} * AddOn(Entity_k) \right)^2 + \sum_k \left( 1 - (\rho_k^{(Credit)})^2 \right) * (AddOn(Entity_k))^2 \right]^{\frac{1}{2}}$$

where  $\rho_k^{(Credit)}$  is the appropriate correlation factor corresponding to the entity  $k$ , determined in accordance with the table set out in A4.6.36.

### Trade level adjusted notional – foreign exchange derivatives

- A4.6.47** The adjusted notional of foreign exchange derivatives is defined as the notional of the foreign currency leg of the contract, converted to the domestic currency.

### Guidance

If both legs of the foreign exchange derivative are denominated in currencies other than the domestic currency, the notional amount of each leg is converted to the domestic currency and the leg with the larger domestic currency value is the adjusted notional amount.

### Add-on for foreign exchange derivatives

- A4.6.48** The effective notional for foreign exchange derivatives is calculated in accordance with the following formula:

$$EffectiveNotional_j^{(FX)} = \sum_{i \in HS_j} \delta_i * d_i^{(FX)} * MF_i^{(type)}$$

where  $i \in HS_j$  refers to trades of hedging set  $HS_j$

#### Guidance

The effective notional for each currency pair, given by the above formula, is the sum of the trade-level adjusted notional amounts multiplied by the supervisory delta adjustments and the maturity factor.

- A4.6.49** The Authorised Person must calculate the hedging set level add-on in accordance with the following formula:

$$AddOn_{HS_j}^{(FX)} = SF_j^{(FX)} * |EffectiveNotional_j^{(FX)}|$$

- A4.6.50** The Authorised Person must then aggregate the foreign exchange derivative add-on across hedging sets by simple summation, as follows:

$$AddOn^{(FX)} = \sum_j AddOn_{HS_j}^{(FX)}$$

### Trade level adjusted notional – equity and commodity derivatives

- A4.6.51** For equity and commodity derivatives, the adjusted notional is defined as the product of the current price of one unit of the stock or commodity and the number of units referenced by the trade.

#### Add-on for equity derivatives

- A4.6.52** The Authorised Person must determine the effective notional value of an equity derivative transaction referenced to an entity in accordance with the following formula:

$$EffectiveNotional_k^{(Equity)} = \sum_{i \in Entity_k} \delta_i * d_i^{(Equity)} * MF_i^{(type)}$$

where  $i \in Entity_k$  refers to trades of entity k.

#### Guidance

The effective notional for each entity, calculated in accordance with the above formula, is the sum of the trade-level adjusted notional amounts multiplied by the supervisory delta adjustments and the maturity factor.

- A4.6.53** The Authorised Person must calculate the add-on for all positions referencing entity k and its effective notional in accordance with the following formula:

$$AddOn(Entity_k) = SF_k^{(Equity)} * EffectiveNotional_k^{(Equity)}$$

**A4.6.54** The Authorised Person must calculate the add-on for the hedging set in accordance with the following formula:

$$AddOn^{(Equity)} = \left[ \left( \sum_k \rho_k^{(Equity)} \wedge * AddOn(Entity_k) \right)^2 + \sum_k (1 - (\rho_k^{(Equity)})^2) * (AddOn(Entity_k))^2 \right]^{\frac{1}{2}}$$

where  $\rho_k^{(equity)}$  is the appropriate correlation factor corresponding to the entity k, determined in accordance with the table set out in A4.6.34.

#### Add-on for commodity derivatives

**A4.6.55** The Authorised Person must determine the effective notional value of a commodity derivative transaction in a commodity of a particular type listed in A4.6.34 in accordance with the following formula:

$$EffectiveNotional_k^{(Com)} = \sum_{i \in Type_k^j} \delta_i * d_i^{(Com)} * MF_i^{(type)}$$

where  $i \in Type_k^j$  refers to trades of commodity type k in hedging set j.

#### Guidance

The effective notional for each commodity derivative, calculated in accordance with the above formula, is the sum of the trade-level adjusted notional amounts multiplied by the supervisory delta adjustments and the maturity factor.

**A4.6.56** The Authorised Person must determine the add-on for all commodity derivatives of commodity type k in accordance with the following formula:

$$AddOn(Type_k^j) = SF_{Type_k^j}^{(Com)} * EffectiveNotional_k^{(Com)}$$

**A4.6.57** The Authorised Person must determine the add-on for its commodity hedging set in accordance with the following formula:

$$AddOn_{HS_j}^{(Com)} = \left[ \left( \rho_j^{(Com)} * \sum_k AddOn(Type_k^j) \right)^2 + \left( 1 - (\rho_j^{(Com)})^2 \right) * \sum_k (AddOn(Type_k^j))^2 \right]^{\frac{1}{2}}$$

where  $\rho_j^{(com)}$  is the appropriate correlation factor, determined in accordance with the table in A4.6.34, for the hedging set j.

**A4.6.58** The Authorised Person must determine the add-on for its commodity asset class in accordance with the following formula:

$$AddOn^{(Com)} = \sum_j AddOn_{HS_j}^{(Com)}$$

**A4.7 Credit RWA - repurchase agreements, reverse repurchase agreements, similar transactions and other deferred settlements**

**A4.7.1** This Section applies to transactions in the Trading Book in relation to repurchase agreements, reverse repurchase agreements, similar transactions and deferred settlements.

**A4.7.2** For repurchase agreements and reverse repurchase agreements the formula for Credit RWA, which must be calculated from T, is as follows:

$$\text{Credit RWA} = E \times \text{CRW}.$$

**A4.7.3** For repurchase agreements:

$$E = \text{MV of the Securities sold} - \text{value of the Collateral or cash received}.$$

**A4.7.4** For reverse repurchase agreements:

$$E = \text{Amount paid or Collateral given} - \text{MV of the Securities received}.$$

**A4.7.5** If the E calculated is negative:

$$\text{Credit RWA} = 0.$$

**A4.7.6** The MV of Securities and the value of cash lodged must include accrued interest.

**A4.7.7** The MV of Securities and the value of Collateral under Rules A4.7.3 to A4.7.6 should be calculated in accordance with the CRM provisions set out in Section 4.13.

**A4.7.8** For deferred settlement purchases and sales transactions over the spot period:

$$\text{Credit RWA} = 0.$$

**A4.7.9** 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 + five business days.

**A4.7.10** For deferred settlement purchases and sales transactions with a contractual settlement date after the spot period as set out above but less than (T + five business days):

$$\text{Credit RWA} = E \times \text{CRW}.$$

**A4.7.11** Not currently in use.

**A4.7.12** For deferred settlement purchases and sales transactions with a contractual settlement date exceeding (T + five business days):

$$\text{Credit RWA} = E \times \text{CRW} \times \text{the appropriate percentage from the table below:}$$



Number of business days calculated from T	Percentages used for calculation of Credit RWA on deferred settlement transactions
6 - 30	500%
31 - 45	750%
46 or more	1000%

### Guidance

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

## A4.8 Credit RWA - other Trading Book transactions

**A4.8.1** For Counterparty Exposures in the Trading Book not covered by Section A4.6 or A4.7, the following formula applies:

$$\text{Credit RWA} = E \times \text{CRW.}$$

### Guidance

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

**A4.8.2** Where a Counterparty has not fully paid a margin requirement on a Derivative transaction listed on an exchange or cleared through a clearing house:

$$E = \text{the shortfall.}$$

**A4.8.3** Where an Authorised Person 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:

$$E = \text{the uncovered premium on the transaction.}$$

**A4.8.4** Where a Counterparty has not fully met amounts owed to an Authorised Person 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:

$$E = \text{the unpaid loss.}$$

## A4.9 Exposures to central counterparties

**A4.9.1** This Section applies to exposures arising from Derivatives, SFTs and/or long settlement transactions that are cleared by a central counterparty (CCP). Exposures arising from the settlement of cash transactions (equities, fixed income, spot FX and spot commodities) are not subject to this Section.

**A4.9.2** Authorised Persons must:

- (a) monitor all their exposures to CCPs; and must have adequate procedures for the regular reporting of information on those exposures to senior

management and appropriate committee or committees of the management body; and

- (b) assess, through appropriate scenario analysis and stress testing, whether the level of capital held by the Authorised Person against exposures to a CCP is adequate.

### Guidance

The assessment under Rule A4.9.2(b) must cover the inherent risks of exposures to the CCP, including potential future credit exposures, exposures from default fund contributions and, where the Authorised Person is acting as a clearing member of the CCP, exposures resulting from contractual arrangements providing for commitments to take over or replace offsetting transactions from clients of another clearing member, in case such other clearing member defaults or becomes insolvent.

### Trade Exposure of a clearing member to a qualifying central counterparty

**A4.9.3** Where an Authorised Person acts as a clearing member, either for its own purposes or as an intermediary between a client and a qualifying central counterparty (QCCP), it must calculate Credit RWA in respect of its Trade Exposure to the QCCP in accordance with Rule A4.6.14, except that it must apply a CRW of 2%, unless Rule A4.9.4 applies.

**A4.9.4** Where an Authorised Person is acting as an intermediary between a client and a QCCP and the terms of the QCCP-related transaction stipulate that the Authorised Person is not obligated to reimburse the client for any losses suffered due to changes in the value of that transaction in the event that the QCCP defaults, it may apply a CRW of 0% when calculating Credit RWA in respect of its Trade Exposure to the QCCP.

### Trade Exposure of a clearing member to a Non-QCCP

**A4.9.5** Where an Authorised Person acts as a clearing member, either for its own purposes or as an intermediary between a client and a Non-QCCP, it must calculate Credit RWA in respect of its Trade Exposure to the Non-QCCP in accordance with Rule A4.6.14 and apply an appropriate CRW for the corporate asset class of the Non-QCCP as set out in Rule 4.12.13.

### Trade Exposure of a clearing member to a client

**A4.9.6** Where an Authorised Person acts as a clearing member, and in that capacity, acts as an intermediary between a client and a CCP, it must calculate Credit RWA in respect of its Trade Exposure to the client in accordance with Rule A4.6.14, together with App5 and relevant provisions of Section 4.13 in respect of any Collateral posted by the client, if applicable.

### Trade Exposure of a client to a clearing member

**A4.9.7** Where an Authorised Person is a client of a clearing member, and enters into a transaction with the clearing member acting as an intermediary between the Authorised Person and a CCP, it must calculate Credit RWA in respect of its Trade Exposure to the clearing member as if it were a Trade Exposure to a QCCP provided all the conditions in Rule A4.9.8 are satisfied.

**A4.9.8** For the purposes of Rule A4.9.7 above, the following conditions must be met:

- (a) the clearing member's offsetting transaction with a QCCP is identified by the QCCP as a client transaction and collateral to support it is held by the QCCP and/or the clearing member, as applicable, under arrangements that would prevent any losses to the Authorised Person due to: (i) the default or insolvency of the clearing member, (ii) the default or insolvency of the clearing member's other clients; and (iii) the joint default or insolvency of the clearing member and any of its other clients;
- (b) the Authorised Person has conducted sufficient legal review (and undertaken such further review as necessary to ensure continuing enforceability) that concludes that, in the event of legal challenge, the relevant courts and administrative authorities would find that the Authorised Person would bear no losses on account of the insolvency of its clearing member or of any of its clearing member's clients under the relevant laws of the relevant jurisdiction(s); and
- (c) laws, regulations, rules, contractual or administrative arrangements applicable to or binding the Authorised Person or the QCCP facilitate the transfer of the Authorised Person's position relating to that contract and transaction and of the corresponding collateral to another clearing member within the applicable margin period of risk in the event of default or insolvency of the original clearing member. In such a circumstance, the Authorised Person's position and the collateral must be transferred at market value unless the client requests to close out the position at market value.

**A4.9.9** Where an Authorised Person is a client of the clearing member and the conditions set out in Rule A4.9.8 are not satisfied, the Authorised Person must capitalise its exposure to the clearing member as a bilateral OTC transaction in accordance with A4.6.14.

**A4.9.10** Without prejudice to Rule A4.9.9, where an Authorised Person that is a client is not protected from losses where the clearing member and another client of the clearing member jointly default, but all the other conditions set out in Rule A4.9.8 are met, it must calculate Credit RWA in respect of its exposure to the clearing member in accordance with Rule A4.6.14, except that it must apply a CRW of 4%.

### **Trade Exposures in an indirect clearing arrangement**

**A4.9.11** Where an Authorised Person that is a client accesses the services of a CCP through indirect clearing arrangements (where, for example it is a client of a clearing member's client), it may calculate Credit RWA in respect of its exposure to its intermediary in accordance with Rules A4.9.7 and A4.9.8, provided that the conditions set out in Rule A4.9.8 are satisfied at every level of the chain of intermediaries.

### **Treatment of posted collateral**

**A4.9.12** Any collateral posted pursuant to transactions covered by Rules A4.9.3 to A4.9.11 must, from the perspective of the Authorised Person posting such collateral, receive the CRWs that otherwise apply to such assets or collateral, regardless of the fact that such collateral has been posted as collateral as part of a clearing arrangement.

**A4.9.13** Where collateral of a clearing member or client is posted with a QCCP or a clearing member, the Authorised Person posting such collateral must also recognise credit risk arising as a result of the collateral being exposed to risk of loss based on the creditworthiness of the entity holding such collateral according to the following Rules:

- (a) Where the entity holding such collateral is the QCCP, a CRW of 2% applies to collateral posted in relation to Trade Exposures. The relevant CRW of the QCCP will apply to collateral posted for other purposes. Where the Authorised Person uses the SA-CCR to calculate exposures, collateral posted which is not held in a bankruptcy remote manner must be accounted for in the NICA term in accordance with Rule A4.6.14. Where the Authorised Person uses an IMM Model in accordance with Rule A4.6.14, the alpha multiplier must be applied to the exposure on posted collateral.
- (b) All collateral posted by the clearing member (including cash, securities, other pledged assets and excess initial or variation margin) that is held by a custodian and is bankruptcy remote from the QCCP, is not subject to a capital requirement for Counterparty Credit Risk exposure to such bankruptcy remote custodian (i.e. the related CRW is 0%).
- (c) Collateral posted by a client, that is held by a custodian, and is bankruptcy remote from the QCCP, the clearing member and other clients, is not subject to a capital requirement for Counterparty Credit Risk. If the collateral is held at the QCCP on a client's behalf and is not held on a bankruptcy remote basis, a 2% risk-weight must apply to the collateral if the conditions in Rule A4.9.9 are met; or 4% if the conditions in Rule A4.9.10 are met.

### Guidance

The treatments set out in Rule A4.9.13 are summarised in the table below.

Collateral		Bankruptcy remote	Conditions	Risk weight
posted by	held by			
Clearing member	QCCP	No		2%
Client	Clearing member	No		CRW of QCCP
Clearing member	Custodian	Yes		0%
Client	Custodian	Yes		0%
	QCCP	Yes	Rule A4.9.8	2%
	QCCP	No	Rule A4.9.10	4%

### Calculation of Credit RWA in relation to prefunded contributions to the default fund of a QCCP

**A4.9.14** An Authorised Person acting as a clearing member must apply the following treatment to its exposures arising from its contributions to a default fund maintained by a QCCP:

- (a) it must calculate the Credit RWA for its prefunded contributions to the default fund of a QCCP in accordance with the approach set out in Rules A4.9.15 to A4.9.17; or
- (b) it must calculate the Credit RWA for its contributions to the default fund of a Non-QCCP in accordance with the approach set out in Rule A4.9.18.

#### **Prefunded contributions to the default fund of a QCCP**

**A4.9.15** An Authorised Person acting as a clearing member must calculate its Credit RWA for its prefunded contributions to the default fund of a QCCP in accordance with the steps set out in Rules A4.9.16 and A4.9.17 below.

**A4.9.16** An Authorised Person must first calculate the hypothetical capital requirement of the QCCP ( $K_{CCP}$ ) due to its counterparty credit risk exposures to all of its clearing members and their clients in accordance with the following formula:

$$K_{CCP} = \sum_{CM_i} EAD_i - RW - capital\ ratio$$

where:

$RW$  = a risk weight of 20%;

$Capital\ ratio$  = 10%;

$EAD_i$  = the exposure amount of the QCCP to clearing member  $i$ , including both the clearing member's own transactions and client transactions guaranteed by the clearing member, and all values of collateral held by the QCCP held over all clearing member accounts (including the clearing member's prefunded default fund contribution) against these transactions, relating to the valuation at the end of the regulatory reporting date before the margin called on the final margin call of that day is exchanged.

#### **Guidance**

1. Where clearing members provide client clearing services, and client transactions and collateral are held in separate sub-accounts to the clearing member's proprietary business, each such client sub-account should enter the sum separately, i.e. the member  $EAD$  in the formula above is then the sum of the client sub-account EADs and any house sub-account EAD. This will ensure that client collateral cannot be used to offset the exposures of the QCCP to clearing members' proprietary activity in the calculation of  $K_{CCP}$ . If any of these sub-accounts contains both derivatives and SFTs, the EAD of that sub-account is the sum of the derivative EAD and the SFT EAD.

If the default fund contributions of the member ( $DF_i$ ) are not split with regard to client and house sub-accounts, they must be allocated per sub-account according to the respective fraction the initial margin of that sub-account has in relation to the total initial margin posted by or for the account of the clearing member.

- (2) For derivatives,  $EAD_i$  is calculated as the bilateral trade exposure the QCCP has against clearing member  $i$  using the approach in Rule A4.6.14. All collateral held by a QCCP to which that QCCP has a legal claim in the event of default of a member or client, including default fund contributions

of that member ( $DF_i$ ), is used to offset the exposure of the QCCP to that member or client, through inclusion in the potential future exposure multiplier in accordance with Rule A4.6.14.

- (3) For SFTs,  $EAD$  is equal to  $\max(EBRM_i - IM_i - DF_i, 0)$ , where:
- $EBRM_i$  denotes the exposure value to clearing member  $i$  before risk mitigation. For the purposes of this calculation, variation margin that has been exchanged (before the margin called on the final margin call of that day) enters into the mark-to-market value of the transactions;
  - $IM_i$  is the initial margin collateral posted by clearing member  $i$  with the QCCP;
  - $DF_i$  is the prefunded default fund contribution by clearing member  $i$  that will be applied upon such clearing member's default, either along with or immediately following such member's initial margin, to reduce the QCCP loss.

**A4.9.17** An Authorised Person must next calculate the capital requirement for each clearing member in accordance with the following formula:

$$K_{CM_i} = \max \left( K_{CCP} \cdot \left( \frac{DF_i^{pref}}{DF_{CCP} + DF_{CM}^{pref}} \right); 10\% * 2\% * DF_i^{pref} \right)$$

where:

$K_{CM_i}$  = the capital requirement on the default fund contribution of clearing member  $i$ ;

$DF_{CM}^{pref}$  = the total prefunded default fund contributions from clearing members;

$DF_{CCP}$  = the prefunded own resources of the CCP (e.g. contributed capital, retained earnings, etc.), which are contributed to the default waterfall, where these are junior or pari passu to prefunded member contributions; and

$DF_i^{pref}$  = the prefunded default fund contributions provided by clearing member  $i$ .

### Guidance

- If the Regulator is not provided with a calculation of  $K_{CCP}$ ,  $DF_{CM}^{pref}$  and  $DF_{CCP}$  or if the Regulator is not able to confirm those calculations, the treatment set out in Rule A4.9.18 shall apply to the calculation made by the relevant Authorised Person to the default fund of a QCCP.
- $K_{CCP}$  should be calculated on a quarterly basis at a minimum, although the Regulator may require more frequent calculations in case of material changes (such as the QCCP clearing a new product). If the Authorised Person or Regulator performed the calculations, it should make available to any other Authorised Person which acts as a clearing member sufficient aggregate information about the composition of the exposures of the QCCP to clearing members and information provided to the Authorised Person for the purposes of the calculation of  $K_{CCP}$ ,  $DF_{CM}^{pref}$  and  $DF_{CCP}$ .
- Such information should be provided at least on a quarterly basis.  $K_{CCP}$  and  $K_{CM_i}$  should be recalculated at least quarterly, and should also be



recalculated when there are material changes to the number or exposure of cleared transactions or material changes to the financial resources of the QCCP.

### **Prefunded and unfunded contributions to the default fund of a Non-QCCP**

**A4.9.18** An Authorised Person must calculate Credit RWA for the exposures arising from its contributions to the default fund of a Non-QCCP in accordance with the following formula:

$$\text{Credit RWA} = (\text{DF} + \text{UC}) \times 10$$

where:

DF = the total prefunded default fund contributions provided by the Authorised Person; and

UC = the total unfunded default fund contributions which the Non-QCCP may require the Authorised Person to provide.

The Regulator may determine whether an Authorised Person's unfunded contribution to the default fund should be factored into the imposition of an Individual Capital Requirement under Rule 10.6.

### **Cap on total Credit RWA with regard to QCCPs**

**A4.9.19** An Authorised Person's total Credit RWA for Trade Exposures to a QCCP and default fund exposures to a QCCP must be limited to the total Credit RWA that would apply if the exposures were to a Non-QCCP.

## **A4.10 Securitisation**

**A4.10.1** An Authorised Person which is an Originator or a Sponsor of a Traditional Securitisation may exclude securitised Exposures from the calculation of Credit RWA amounts only if all of the following conditions have been complied with:

- (a) except as provided in (g), (i) and (k), significant Credit Risk associated with the securitised Exposures has been transferred from the Originator to third parties;
- (b) the Authorised Person does not maintain effective or indirect control over the underlying Exposures;
- (c) the assets are legally isolated from the Authorised Person in order to ensure the assets are beyond the reach of the Authorised Person in the event of bankruptcy or receivership;
- (d) the Securities issued are not the obligations of the Authorised Person;
- (e) the Securities are issued pursuant to the securitisation by an SPE and the holders of the beneficial interests in that entity have the right to pledge or exchange them without restriction;
- (f) where a securitisation includes a Clean-Up Call, Clean-Up Calls must satisfy the conditions set out in Rule A4.10.3.
- (g) the documentation of the securitisation does not contain any clauses that:



- (i) require the Authorised Person systematically to alter the underlying Exposures such that the pool's weighted average credit quality is improved unless this is achieved by selling Exposures to independent and unaffiliated third parties which are not Connected to the Authorised Person or Related Persons of the Authorised Person in accordance with Rule 4.4.6 at market prices;
  - (ii) allow for increases in a retained First Loss Position or Credit Enhancement provided by the Authorised Person after the securitisation's inception;
  - (iii) other than step-up features incorporated in relation to the underlying Exposures of the securitisation, increase the yield payable to parties other than the Authorised Person, such as investors and third-party providers of Credit Enhancements, in response to deterioration in the credit quality of the underlying Exposures in the pool; or
  - (iv) other than Clean-Up Calls, oblige the Authorised Person to repurchase any of the underlying Exposures, at any time, except where that obligation arises from the exercise of a representation or warranty given by the Authorised Person. The Authorised Person may give a representation or warranty solely in respect of the nature or existing state of facts of any underlying Exposure, that is capable of being verified, at the time of its transfer.
- (h) the transfer of the underlying Exposures or the transfer of risk through sub-participation does not contravene the terms and conditions of any underlying agreement in respect of the underlying Exposures and where applicable, all the necessary consents for the transfer or sub-participation have been obtained;
- (i) the documentation of the securitisation specifies that, if cash flows relating to the underlying Exposures are rescheduled or renegotiated, the SPE to which the Exposures have been transferred and not the Authorised Person, would be subject to the rescheduled or renegotiated terms;
- (j) the Authorised Person receives a fixed amount of consideration for the underlying Exposures;
- (k) the Authorised Person holds not more than 20% of the aggregate original amount of all Securities issued by the SPE, except where such holdings comprise entirely of Securities that have a Credit Quality Grade of 1 as set out in Rules in Sections 4.11 and 4.12, and all transactions with the SPE are conducted at arm's length and on market terms and conditions;
- (l) where the assets relate to the Islamic Financial Business of an Authorised Person, a written confirmation from the appointed Shari'a Supervisory Board that the securitisation complies with Shari'a; and
- (m) each of the points (a) to (l) must be evidenced and confirmed by a legal opinion from a qualified legal counsel.

### **Guidance**

1. An Authorised Person is deemed to have effective control over the transferred Exposures if:

- a. it is able to repurchase from the transferee the previously transferred Exposures in order to realise their benefits; or
  - b. it is obligated to retain the risk of the transferred Exposures.
2. In this regard, an Authorised Person acting as a Servicer in respect of the transferred Exposures will not necessarily constitute effective control of the Exposures.
3. In respect of Rule A4.10.1(j), the amount of consideration received in the form of a fixed amount of Securities in the SPE would generally be regarded as meeting this requirement if the transaction is conducted at arm's length and on market terms and conditions. Also, this requirement does not preclude excess cash from being channelled to the Authorised Person after all claims connected with the Securities issued by the SPE have been paid out.

**A4.10.2** An Authorised Person which is an Originator or a Sponsor of a Synthetic Securitisation may recognise the credit protection obtained through the Synthetic Securitisation in its calculation of Credit RWA amounts only if all of the following conditions have been complied with:

- (a) significant Credit Risk associated with the underlying Exposures has been transferred from the Originator to third parties;
- (b) the instrument used to transfer the underlying Credit Risks must not contain terms or conditions that limit in any way the amount of Credit Risk transferred, including, but not limited to, clauses that:
  - (i) materially limit the credit protection or Credit Risk transference (e.g. significant materiality thresholds below which credit protection is deemed not to be triggered even if a credit event occurs or those that allow for the termination of the protection due to deterioration in the credit quality of the underlying Exposures);
  - (ii) require the Authorised Person to alter the underlying Exposures to improve the weighted average credit quality of the pool;
  - (iii) increase the cost of credit protection to the Authorised Person in response to deterioration in the credit quality of the underlying Exposures;
  - (iv) increase the yield payable to parties other than the Authorised Person, such as investors and third-party providers of Credit Enhancements, in response to a deterioration in the credit quality of the underlying Exposures; or
  - (v) provide for increases in a retained First Loss Position or Credit Enhancement provided by the originating bank after the transaction's inception.
- (c) an Authorised Person must provide an external legal opinion from a qualified legal counsel that confirms each of the points (i-v) and the enforceability of the contracts in all relevant jurisdictions;

- (d) where the assets relate to the Islamic Financial Business of an Authorised Person, a written confirmation from the appointed Shari'a Supervisory Board that the securitisation complies with Shari'a;
- (e) where the securitisation includes a Clean-Up Call it must meet the requirements of Rule A4.10.3;
- (f) in the case where the risks associated with the underlying Exposures are transferred to an SPE:
  - (i) the Securities issued by the SPE are not obligations of the Authorised Person;
  - (ii) the holders of the beneficial interests in that SPE have the right to pledge or exchange their interests without restriction; and
  - (iii) the Authorised Person holds not more than 20% of the aggregate original amount of all Securities issued by the SPE, except where such holdings consist entirely of Securities that have a Credit Quality Grade of 1 in accordance with Rules in Sections 4.11 and 4.12, and all transactions with the SPE are conducted at arm's length and on market terms and conditions;
- (g) the Authorised Person has, on an on-going basis, a comprehensive understanding of the risk characteristics of its individual securitisation Exposures, whether on or off-balance sheet, as well as the risk characteristics of the pools underlying its securitisation Exposures;
- (h) the Authorised Person is able to access performance information on the underlying Exposures on an on-going basis in a timely manner. Such information may include, as appropriate, Exposure type, percentage of loans 30, 60 and 90 days past due, default rates, prepayment rates, loans in foreclosure, property type, occupancy, average credit score or other measures of creditworthiness, average loan-to-value ratio, and industry and geographic diversification. For Re-securitisations, the Authorised Person should have information not only on the underlying securitisation tranches, such as the Issuers' names and credit quality, but also on the characteristics and performance of the pools underlying the securitisation tranches; and
- (i) the Authorised Person has a thorough understanding of all structural features of a securitisation transaction that would materially impact the performance of the transaction, such as the contractual waterfall and waterfall-related triggers, Credit Enhancements, liquidity enhancements, market value triggers, and deal-specific definitions of default.

### **Guidance**

In relation to Rules A4.10.1 and A4.10.2, significant Credit Risk will be considered to have been transferred by the Originator of a securitisation if:

- a. the RWA amounts of the mezzanine securitisation positions held by the Originator in the securitisation do not exceed 50% of the RWA amounts of all mezzanine securitisation positions existing in this securitisation; and

- b. where there are no mezzanine securitisation positions in a given securitisation and the Originator can demonstrate that the Exposure value of the securitisation positions that would be subject to deduction from Capital Resources or a 1000% risk weight exceeds a reasonable estimate of the expected loss on the securitised Exposures by a substantial margin, the Originator does not hold more than 20% of the Exposures values of the securitisation positions that would be subject to deduction from Capital Resources or a 1000% risk weight.

### **Operational requirements for the treatment of Clean-Up Calls**

**A4.10.3** Where a Clean-Up Call is included within a securitisation, the Authorised Person which has the ability to exercise the Clean-Up Call must ensure that:

- (a) the exercise of the Clean-Up Call must not be mandatory, in form or substance;
- (b) the Clean-Up Call must not be structured to avoid allocating losses to Credit Enhancements, or positions held by investors or in any way structured to provide Credit Enhancement; and
- (c) the Clean-Up Call must only be exercisable when 10% or less of the original underlying Exposures or Securities issued in that securitisation remains, or in the case of a Synthetic Securitisation, when 10% or less of the original reference portfolio value remains.

**A4.10.4** Where the conditions listed in Rule A4.10.3 are not met the Authorised Person must hold capital against the Exposures as follows:

- (a) for a Traditional Securitisation the underlying Exposures must be treated as if they had not been securitised;
- (b) Authorised Persons must not include any gain-on-sale in any element or component of their Capital Resources;
- (c) for Synthetic Securitisations, the Authorised Person must hold capital against the entire amount of securitised Exposures; and
- (d) where a Synthetic Securitisation incorporates a call that is not a Clean-Up Call, the Authorised Person must treat the transaction in accordance with the relevant CRM techniques in Section 4.13.

**A4.10.5** An Authorised Person must treat a currency mismatch or a Maturity Mismatch between the underlying Exposure being hedged and the CRM obtained through the Synthetic Securitisation in accordance with Rules in Sections 4.13 and A4.3.

### **A4.11 Large Exposures**

#### **Exempt Exposures**

**A4.11.1** An Authorised Person may treat the following Exposures as exempt from the Large Exposures limits in Chapter 4 if they are to Counterparties not Connected to the Authorised Person:

- (a) asset items or Exposures constituting claims on central governments and central banks which receive a Credit Quality Grade rating 1 or 2 in accordance with Rule 4.12.4;

- (b) asset items or Exposures constituting claims on international organisations and multi-lateral development banks (MDBs) which receive a 0% (Credit Quality Grade rating of 1) risk weight as set out at Rule 4.12.7;
- (c) asset items or Exposures carrying the explicit guarantees of either (a) or (b) where the claims on the entity providing the guarantee would receive a 0% weighting (Credit Quality Grade rating of 1);
- (d) Exposures for which the Authorised Person has Collateral in the form of cash Deposits or certificates of Deposit, including certificates of Deposit issued by the Authorised Person, held by the Authorised Person, or held by the Authorised Person's Parent Financial Institution or a Subsidiary of the Authorised Person, but only if:
  - (i) the Authorised Person and its Parent Financial Institution or the Subsidiary of the Authorised Person concerned are subject to consolidated supervision; and
  - (ii) the enforceability requirements in Section 4.13 (CRM) are met;
- (e) Exposures arising from undrawn credit facilities that are classified as low risk off balance sheet items and provided that an agreement has been concluded with the Client or group of Connected clients under which the facility can only be drawn only if it has been ascertained that it will not cause the limit as set out in Rule 4.15.5 to be exceeded;
- (f) Exposures secured by mortgages on residential property and leasing transactions under which the lessor retains full ownership of the residential property leased for as long as the lessee has not exercised his option to purchase, in all cases up to 50% of the value of the residential property concerned; and
- (g) material holdings in Financial Institutions and other Exposures which have been deducted from an Authorised Person's Capital Resources as required in Chapter 3.

### **Guidance**

1. In order to be applicable under (c) the guarantees must meet the requirements of Section 4.13.9 in relation to CRM.
2. An Authorised Person can only treat Exposures as collateralised provided the conditions of Rules 4.13.5 to 4.13.8 (relating to CRM) are met. Item (d) also includes cash received under a CLN issued by the Authorised Person and loans and Deposits of a Counterparty to or with the Authorised Person which are subject to an on balance sheet Netting agreement recognised under Section 4.13 (CRM).
3. The Regulator may consider a waiver for other sovereign Exposures where there is a local regulatory requirement to hold assets with a national regulatory authority. Authorised Persons will be required to apply for a waiver of the Large Exposure requirements in this regard and will be considered by the Regulator on a case by case basis.

**A4.11.2** Where Exposures to a Client are guaranteed by a third party, or secured by Collateral issued by a third party, an Authorised Person may:

- (a) provided the Collateral meets the requirements of Section 4.13 (CRM), and would be assigned a lower risk weight under Section 4.12, treat that portion of the Exposure which is secured by Collateral as an Exposure to the third party. An Authorised Person must treat the portion secured by Collateral as having being incurred to the third party providing the Collateral rather than to the Client for the purposes of considering the limits as set out at Rule 4.15.5; or
- (b) provided the guarantee meets the requirements of Section 4.13 (CRM), and would be assigned a lower risk weight under Section 4.12, treat that portion of the Exposure which is guaranteed as an Exposure to the third party. An Authorised Person must treat the portion guaranteed as having being incurred to the third party rather than to the Client for the purposes of considering the limits as set out at Rule 4.15.5. When considering the guarantee there must not be any Maturity Mismatch between the guarantee and the underlying Exposure.

**A4.11.3** If an Exposure is partially guaranteed by an Authorised Person's Parent Financial Institution, and would be assigned a lower risk weight under Section 4.12, only that part of the Exposure subject to the guarantee is exempt from the Large Exposure limit in Rule 4.15.5. When considering the treatment of this Rule an Authorised Person may also consider the exemptions permitted under Rule 4.15.18 relating to parental guarantees.

#### Identification of Counterparties

**A4.11.4** When calculating the Exposures of an Authorised Person, the firm must include Trading Book Exposures and Non-Trading Book Exposures to:

- (a) a single Counterparty;
- (b) group of Closely Related Counterparties;
- (c) Connected Counterparties; and
- (d) transactions, schemes or Funds.

#### Guidance

1. An individual Counterparty is a natural or legal Person, which include governments, local authorities, public sector enterprises (PSEs), trusts, corporations, unincorporated businesses and non-profit-making bodies.
2. Examples of a Counterparty include:
  - a. the customer or borrower;
  - b. where the Authorised Person 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 Person has been accepted by another Financial Institution, the acceptor.

### **Group of Closely Related Counterparties**

- A4.11.5** (1) For Large Exposures purposes, 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.
- (2) Persons who are Closely Related to each other are also Connected with each other.
- A4.11.6** (1) A single group of Closely Related Counterparties means, in relation to an Authorised Person, all the Persons to which the Authorised Person has an Exposure and which are Closely Related to each other.
- (2) An Authorised Person must treat two or more Persons as falling within a group of Closely Related Counterparties if the Authorised Person has Exposures to them all and any loss to the Authorised Person on any of the Exposures to one is likely to be associated with a loss to the Authorised Person with respect to at least one Exposure to each of the others.

### **Guidance**

Two or more Counterparties between whom there is no relationship of control as described in Rules A4.11.5 and A4.11.6 will be regarded as constituting a single risk if they are so interconnected that, if one of them were to experience financial problems, in particular funding or repayment difficulties, the other or all of the others would also be likely to encounter funding or repayment difficulties.

### **Connected Counterparties**

- A4.11.7** For Large Exposures 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) it is Connected to the first Person;
  - (b) it is an Associate of the first Person;
  - (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.



**Guidance**

A group of Connected Counterparties would be considered to be such where the entities share the same ultimate owner even though they may not be formally structured as a Group.

**Exposures to transactions, schemes or Funds**

**A4.11.8** Where an Authorised Person has an Exposure to a transaction, scheme, Fund, or other Exposure to a pool of underlying Exposures, the Authorised Person must assess the Exposure to determine whether the Exposure is a group of Closely Related Counterparties in its economic substance.

**Guidance**

1. When considering this Rule the Authorised Person should consider the following factors:
  - a. the structure, independence and control of the transaction, including governance arrangements;
  - b. the inter relatedness of the underlying Exposures;
  - c. beneficial owners of the underlying Exposures and whether they could be deemed Connected or Closely Related; and
  - d. whether the transactions are conducted on an arm's length basis.
2. An Authorised Person should look through the structure to determine whether there are any Counterparties or Exposures that might give rise to risks arising from a Large Exposure.

**Connected Counterparty exemptions**

**A4.11.9** An Authorised Person may treat as exempt from the Large Exposure limits in Chapter 4 an Exposure to a Counterparty or Counterparties Connected to the Authorised Person if all of the following conditions are met:

- (a) the Authorised Person has given the Regulator 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 Large Exposure limits on a continuing basis when using the exemption;
- (b) the total amount of the Exposures that an Authorised Person is treating as exempt under this Rule does not exceed 50% of the Authorised Person's Tier 1;
- (c) the Authorised Person makes and retains a record that identifies each Exposure it has treated in this way;
- (d) the Authorised Person is subject to consolidated supervision;
- (e) the Counterparty is:
  - (i) an Authorised Person which is the subject of consolidated supervision; or

- (ii) a member of the Authorised Person's Group which is the subject of consolidated supervision to the satisfaction of the Regulator; and
- (f) the Exposure satisfies one or more of conditions (i) to (iii):
  - (i) it is a loan made by the Authorised Person with a maturity of one year or less in the course of the Authorised Person carrying on a treasury role for other members of its Group;
  - (ii) it is a loan to the Parent of the Authorised Person made in the course of a business carried on by the Authorised Person of lending to its Parent cash that is surplus to the needs of the Authorised Person, provided that the amount of that surplus fluctuates regularly; or
  - (iii) it arises from the Authorised Person or a Counterparty Connected to the Authorised Person operating a central risk management function for Exposures arising from Derivatives contracts.

### **Measuring Exposure to Counterparties and Issuers**

**A4.11.10** Rules A4.11.12 to A4.11.28 apply to both Non-Trading Book and Trading Book Exposures.

**A4.11.11** When calculating an Exposure, an Authorised Person must include accrued interest and dividends due.

**A4.11.12** An Authorised Person must not offset Non-Trading Book and Trading Book Exposures.

**A4.11.13** A net short position is not an Exposure for the purposes of Large Exposures.

**A4.11.14** The value of an Authorised Person'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**

**A4.11.15** An Authorised Person must calculate the value of an Exposure to the Issuer of a Security which is held in the Authorised Person'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.

**A4.11.16** For the purposes of Rule A4.11.15, 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:
  - (i) fixed rate or index-linked, and are within the same residual maturity time band; or
  - (ii) floating rate.

**A4.11.17** An Authorised Person must calculate the value of an Exposure to the Issuer of a Security that is held in the Authorised Person'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.

**A4.11.18** An Authorised Person 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.

**A4.11.19** An Authorised Person 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.

**A4.11.20** An Authorised Person must include as a short position a commitment by it to sell a debt Security or equity at a future date.

**A4.11.21** 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.

**A4.11.22** When determining its Exposure to an Issuer arising from an Option, an Authorised Person must value the notional principal of an Option as the amount of principal underlying the Option.

**A4.11.23** An Authorised Person 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.

**A4.11.24** An Authorised Person must, for the purposes of Large Exposures, 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.

**A4.11.25** An Authorised Person which receives cash on a repurchase agreement must treat the cash as if it is on its balance sheet and in accordance with Sections 4.9 and 4.13. Any Collateral received against repurchase agreements or Securities and

commodities borrowing must also be treated as a balance sheet item under Sections 4.9 and 4.13.

**A4.11.26** An Authorised Person 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 eligible financial Collateral as defined in Rule 4.13.5. If the Collateral is not such an eligible financial Collateral, the Authorised Person must treat the transaction as an unsecured loan to the Counterparty.

**A4.11.27** An Authorised Person 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 Person exceed the Securities or cash it receives (i.e. there is a net margin given by the Authorised Person) in a repurchase agreement or reverse repurchase agreement.

**A4.11.28** An Authorised Person must calculate in accordance with Section 5.10 an Exposure to the Issuer arising from the Underwriting or sub-Underwriting of a new Issue of Securities.

## **A4.12 The Simplified Approach for Category 2 and 3A firms**

**A4.12.1** This Section applies only to an Authorised Person in Category 2 or 3A for the purposes of Section 4.7.

**A4.12.2** An Authorised Person that applies the Simplified Approach must comply with the requirements of Chapter 4 with the variations as prescribed below:

### **Risk Weights**

#### **Central government and central bank asset class**

**A4.12.3** Under the Simplified Approach, Rules 4.12.4 to 4.12.5 are replaced by Rules A4.12.4 to A4.12.6.

**A4.12.4** Subject to Rules A4.12.5 and A4.12.6, an Authorised Person must risk-weight any CR Exposure in the central government and central bank asset class on the basis of the consensus country risk classifications of export credit agencies (referred to in this Section as "ECA") participating in the OECD's "Arrangement on Officially Supported Export Credits" and in accordance with the table below.

Risk weights for the central government and central bank asset class

Country risk classification	0 or 1	2	3	4 to 6	7
Risk Weights	0%	20%	50%	100%	150%

### **Guidance**

The consensus country risk classification for the purpose of the "Arrangement on Officially Supported Export Credits" is published by the OECD. At the time of the making of these Rules, the classification was available on the website of the OECD

on the Export Credit Arrangement web-page of the Trade and Agriculture Directorate (<http://www.oecd.org/trade/xcred/cre-crc-current-english.pdf>).

**A4.12.5** An Authorised Person must apply a 0% risk weight to any CR Exposure to any central government or any central bank of a GCC member country, which is denominated in the domestic currency, and funded in the domestic currency of that GCC member country.

**A4.12.6** For any CR Exposure to any other central government or central bank which is denominated and funded in the local currency of that jurisdiction, an Authorised Person may apply such risk weights as may be specified by the banking regulator of that jurisdiction.

#### **Bank asset class**

**A4.12.7** Under the Simplified Approach, Rules 4.12.10 to 4.12.12 are replaced by the following Rule A4.12.8.

**A4.12.8** An Authorised Person must risk-weight any CR Exposure in the bank asset class on the basis of the consensus ECA country risk classifications as referred to in A4.12.4 for the jurisdictions in which they are incorporated, in accordance with the following table:

Risk weights for the bank asset class

Country risk classification	0 or 1	2	3	4 to 6	7
Risk Weights	20%	50%	100%	100%	150%

#### **Corporate asset class**

**A4.12.9** Under the Simplified Approach, Rules 4.12.13 to 4.12.15 are replaced by the following Rule A4.12.10.

**A4.12.10** An Authorised Person must apply a 100% risk weight to any CR Exposure in the corporate asset class.

#### **Credit Risk mitigation - Collateral**

**A4.12.11** Under the Simplified Approach, Rules 4.13.5 to 4.13.7 are replaced by the following Rules A4.12.12 to A4.12.14.

**A4.12.12** An Authorised Person may only use the financial Collateral Simplified Approach (FCSA) in its treatment of recognised Collateral for the purposes of calculating the Credit RWA for its Exposures booked in its Non-Trading Book.

**A4.12.13** (1) For an Authorised Person using the FCSA, eligible financial Collateral comprises:

- (a) cash (as well as certificates of Deposit or other similar instruments issued by the Authorised Person) on Deposit with the Authorised Person;
- (b) gold;

- (c) any debt Securities issued by sovereigns (including a central government or central bank) of a jurisdiction that has an ECA country risk classification of 4 or better; and
  - (d) any debt Securities issued by a PSE that is treated as a sovereign and is of a jurisdiction that has an ECA country risk classification of 4 or better.
- (2) Cash-funded CLNs issued by an Authorised Person against Exposures in the Non-Trading Book which fulfil the criteria for eligible Credit Derivatives must be treated as cash collateralised transactions.
- (3) Cash, mentioned in (1)(a) includes cash on Deposit, certificates of Deposit or other similar instruments issued by the Authorised Person that are held as Collateral at a third-party bank in a non-custodial arrangement and that are pledged or assigned to the Authorised Person. This is subject to the pledge or assignment being unconditional and irrevocable. Under the FCSA, the risk weight to be applied to the Exposure covered by such Collateral must be the risk weight of the third-party bank.

**A4.12.14** In the case of any Counterparty Risk Exposures in Rules A4.12.12 and A4.12.13, arising from an SFT which is included in the Trading Book, eligible financial Collateral includes all instruments which an Authorised Person may include in its Trading Book.

#### **Credit Risk mitigation - Guarantees**

**A4.12.15** Under the Simplified Approach, Rules 4.13.9 and 4.13.10 are replaced by the following Rules A4.12.16 to A4.12.19.

**A4.12.16** An Authorised Person may recognise guarantees provided by the following eligible guarantors:

- (a) the Bank for International Settlements, the International Monetary Fund, the European Central Bank, and the European Commission;
- (b) the MDBs referred to in Rule 4.12.8;
- (c) PSEs; and
- (d) other entities eligible for a CRW of 20% or better and with a lower risk weight than the Counterparty.

**A4.12.17** For the purpose of calculating the risk weight of a guaranteed Exposure, an Authorised Person must assign the guaranteed portion the risk weight of the eligible guarantors. The uncovered portion of the Exposure must be assigned the risk weight of the underlying Counterparty.

**A4.12.18** An Authorised Person can apply a 0% risk weight to any portions of Exposures guaranteed by central governments or central banks of a GCC member country where the guarantee is denominated in the domestic currency of that country, and the Exposure is funded in that same domestic currency.

**A4.12.19** An Authorised Person must treat any materiality thresholds on payments below which no payment will be made in the event of loss as retained First Loss Positions and must deduct the full amount from its Capital Resources.

## APP5 CREDIT VALUATION ADJUSTMENT (CVA) RISK

### A5.1 Meaning of Credit Valuation Adjustment

For the purposes of this Appendix, "Credit Valuation Adjustment" or "CVA" means an adjustment to the fair value of the portfolio of transactions with a counterparty. The adjustment reflects the current market value of the Credit Risk of the counterparty to the Authorised Person, but does not reflect the current market value of the credit risk of the Authorised Person to the counterparty.

### A5.2 Scope

- A5.2.1** (1) Subject to (2), an Authorised Person must calculate its capital requirement for CVA risk in accordance with this Appendix for all OTC Derivative Contracts in respect of all of its business activities, other than Credit Derivatives recognised to reduce risk-weighted exposure amounts for Credit Risk.
- (2) Subject to the written approval of the Regulator, an Authorised Person whose aggregate notional amount of OTC Derivatives is less than or equal to US \$100 billion may choose to set its capital requirement for CVA risk as equal to 100% of its capital requirement for Counterparty Credit Risk, where this treatment must be applied to the entire portfolio of the Authorised Person and CVA hedges are not recognised.

#### Guidance

The Regulator may remove this option if it determines that the CVA risk resulting from the derivative positions of the Authorised Person contributes materially to the overall risk profile of the Authorised Person.

- A5.2.2** An Authorised Person must include Securities Financing Transactions in the calculation of the capital requirement required by Rule A5.2.1 if the Authorised Person considers the CVA risk exposures arising from those transactions are material. The Authorised Person should assess the materiality of CVA risk exposures arising from SFTs in the course of its Internal Risk Assessment Process, as set out in A11.1.
- A5.2.3** Transactions with a QCCP and a client's transactions with a clearing member, when the clearing member is acting as an intermediary between the client and a QCCP and the transactions give rise to a trade exposure of the clearing member to the QCCP, are excluded from the capital requirements for CVA risk.

### A5.3 Calculation of CVA capital requirement

- A5.3.1** An Authorised Person must calculate a portfolio capital requirement for CVA risk for each counterparty in accordance with the following formula, taking into account CVA hedges that are eligible in accordance with Section A5.4:

$$K = 2.33 \cdot \sqrt{h} \cdot \sqrt{\left( \sum_i 0.5 \cdot w_i \cdot \left( M_i \cdot EAD_i^{total} - M_i^{hedge} B_i \right) - \sum_{ind} W_{ind} \cdot M_{ind} \cdot B_{ind} \right)^2 + \sum_i 0.75 \cdot w_i^2 \cdot \left( M_i \cdot EAD_i^{total} - M_i^{hedge} B_i \right)^2}$$



where:

$h$  = the one-year risk horizon (in units of a year);  $h=1$ ;

$w_i$  = the weight applicable to counterparty  $i$ .

Counterparty  $i$  must be mapped to one of the six weights  $w_i$  based on the Credit Quality Grade determined from an external credit assessment by a nominated ECAI, as set out in Table 1. For a counterparty for which a credit assessment by a nominated ECAI is not available, an Authorised Person must assign  $w_i=1.0\%$  to this counterparty;

Credit Quality Grade	Weight $w_i$
1	0.7%
2	0.8%
3	1.0%
4	2.0%
5	3.0%
6	10.0%

$EAD_i^{total}$  = the total Counterparty Risk exposure value of counterparty  $i$  (summed across its netting sets) including the effect of collateral as applicable to the calculation of the capital requirements for Counterparty Risk for that counterparty. The exposure must be discounted by applying the following factor:

$$\frac{1 - e^{-0.05 * M_i}}{0.05 * M_i^{hedge}}$$

$B_i$  = the notional of purchased single name credit default swap hedges (summed if more than one position) referencing counterparty  $i$  and used to hedge CVA risk. That notional amount must be discounted by applying the following factor:

$$\frac{1 - e^{-0.05 * M_i^{hedge}}}{0.05 * M_i^{hedge}}$$

$B_{ind}$  = the full notional of one or more index credit default swap of purchased protection used to hedge CVA risk. That notional amount must be discounted by applying the following factor:

$$\frac{1 - e^{-0.05 * M_{ind}}}{0.05 * M_{ind}}$$

$W_{ind}$  = the weight applicable to index hedges. An Authorised Person must determine  $W_{ind}$  by calculating a weighted average of  $w_i$  that are applicable to the individual constituents of the index;

$M_i$  = the effective maturity of the transactions with counterparty  $i$ .  $M_i$  must be calculated as the notional weighted average maturity of the transactions with counterparty  $i$ ;

$M_i^{hedge}$  = the maturity of the hedge instrument with notional  $B_i$  (the quantities  $[M_i^{hedge} B_i]$  are to be summed if there are several positions); and

$M_{ind}$  = the maturity of the index hedge. In the case of more than one index hedge position  $M_{ind}$  is the notional-weighted maturity.

**A5.3.2** Where a counterparty is included in an index on which a credit default swap used for hedging Counterparty Risk is based, the Authorised Person may subtract the notional amount attributable to that counterparty in accordance with its reference entity weight from the index credit default swap notional amount and treat it as a single name hedge ( $B_i$ ) of the individual counterparty with maturity based on the maturity of the index.

#### **A5.4 Eligible hedges**

**A5.4.1** Hedges must be "Eligible Hedges" for the purposes of the calculation of capital requirements for CVA risk in accordance with Section A5.3 only where they are used for the purpose of mitigating CVA risk and managed as such, and single-name credit default swaps or other equivalent hedging instruments referencing the counterparty directly.

**A5.4.2** An Authorised Person must not reflect other types of Counterparty Risk hedges in the calculation of the capital requirements for CVA risk. In particular, tranching or  $n$ th-to-default credit default swaps and credit linked notes are not Eligible Hedges for the purposes of the calculation of the capital requirements for CVA risk.

**A5.4.3** Eligible Hedges that are included in the calculation of the capital requirements for CVA risk must not be included in the calculation of the capital requirements for Specific Risk as set out in App6 or treated as credit risk mitigation other than for the Counterparty Risk of the same portfolio of transaction.

**APP6 MARKET RISK****A6.1 Market Risk systems and controls****Guidance**

1. In accordance with Section 5.2, an Authorised Person 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 Person defines and measures Market Risk;
  - b. the Authorised Person'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 Person's strategy, historical performance, and the overall level of earnings or capital the Authorised Person 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 Person 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 Person should consider whether the measurement methodologies should be tested, for example, through back-testing, and the frequency of such testing.

3. An Authorised Person 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.
4. Where an Authorised Person 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 8).
5. An Authorised Person 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 Person should implement an effective system for monitoring its Market Risk. This system should be independent of those within the Authorised Person which are responsible for taking Market Risk.
7. An Authorised Person should implement a system of management reporting which provides relevant, accurate, comprehensive, timely and reliable Market Risk reports to relevant functions within the Authorised Person. 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 Person'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 Person should have procedures, including stop-loss procedures, for taking appropriate action according to the information within the management reports.
9. An Authorised Person should ensure that there are controls and procedures for reporting any trades booked at off-market rates.
10. An Authorised Person 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 Person'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 Person's overall risk appetite.

13. An Authorised Person should use a model or some form of analytical tool to assess risk in complex instruments or across portfolios. An Authorised Person which wishes to use such a model to determine part of its financial resources requirement, should refer to Section 5.3.
14. An Authorised Person 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 Person 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 Person's overall business (for example, whether the Authorised Person is an active market maker). An Authorised Person 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 Person should provide a process for the identification, timely reporting and subsequent action in respect of exceptions to limits. An Authorised Person should also ensure that limit breaches and action arising from exceptions are monitored. An Authorised Person 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 Person should document the appropriate products to be used to hedge Exposure and identify individuals within the Authorised Person or Group responsible for monitoring hedge performance.
19. An Authorised Person should ensure that it makes and maintains appropriate prudential records which show and explain the Authorised Person's transactions, disclose its financial position and Exposure to Market Risk and enable it to demonstrate compliance with these rules. In particular, an Authorised Person 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.

## **A6.2 Interest Rate Risk Capital Requirement**

### **Guidance**

Section A6.2 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 5.4.1(b).

- A6.2.1** An Authorised Person which calculates its Interest Rate Risk Capital Requirement in accordance with Rule 5.4.1(b) must apply the Rules in this Section.

**A6.2.2** An Authorised Person 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 A6.2.13; and
- (b) General Market Risk calculated in accordance with Rule A6.2.15.

**A6.2.3** An Authorised Person 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;
- (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 Person must derive the notional positions in accordance with Rules A6.2.5 to A6.2.12.

- A6.2.4** (1) An Authorised Person 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)

- A6.2.5** (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 A6.2.13 and A6.2.15. 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 Person must derive a notional position (in the currency concerned) for certain instruments (including interest rate Derivatives) is set out in Rules A6.2.6 to A6.2.12.

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

**A6.2.6** 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 Person 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
- (b) where an Authorised Person buys an interest rate Future or sells 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 agreement); 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) plus the maturity of the Deposit period.

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

**A6.2.7** A Future and a forward on a single debt Security must be treated as a notional debt a notional zero coupon government Security as follows:

- (a) where an Authorised Person 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; and
    - (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 Person 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**

**A6.2.8** 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**

**A6.2.9** An interest rate and a currency swap must be treated as two notional government Securities as follows:

- (a) where the Authorised Person 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 Person 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 Person 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 Person 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; and

- (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 5.6).

**Dual currency bonds**

**A6.2.10** 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**

**A6.2.11** 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 subject to a repurchase agreement (but not a reverse repurchase agreement), the Authorised Person 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 Person.

**Cash legs of reverse repos**

- A6.2.12** (1) 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.
- (2) An Authorised Person 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.

**Guidance**

If a Security is subject to a reverse repurchase agreement (but not a repurchase agreement), the Authorised Person 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.

## 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.

- A6.2.13** (1) An Authorised Person 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).
- (2) An Authorised Person must not offset between different issues.
- (3) An Authorised Person must determine the appropriate risk percentage by reference to the following table:

Issuer	Credit Quality Grade	Residual Term to Maturity	Risk Percentage
Sovereign Debt	1	Any	0.00%
This category includes -			
(a) all forms of government debt, including bonds, treasury bills and other short-term instruments; and	2 or 3	6 months or less	0.25%
(b) Securities issued by PSEs which qualify for a 0% risk weight for Credit Risk.		More than 6 and up to 24 months	1.00%
An Exposure to any debt Security issued by -		More than 24 months	1.60%
(i) the central government or monetary authority; or	4 or 5	Any	8.00%
(ii) other central governments with a Credit Quality Grade of 3 or better as set out in Chapter 4,	6	Any	12.00%
which is denominated in the domestic currency and funded in the same currency must be assigned a 0% Specific Risk charge.	Unrated	Any	8.00%
The Regulator may, at its discretion, assign a higher risk charge other than the above to Securities issued by certain governments, especially in cases where the Securities are			

Issuer	Credit Quality Grade	Residual Term to Maturity	Risk Percentage
denominated in a currency other than that of the issuing government.			
<b>Qualifying Debt</b> This category includes - (a) any Security that is issued by an MDB; (b) any Security (including one issued by a PSE) which has a Credit Quality Grade of 3 or better as set out in Chapter 4; and (c) any unrated Security issued by a PSE which belongs to a country with a Credit Quality Grade of 1 as set out in Chapter 4.		6 months or less	0.25%
		More than 6 and up to 24 months	1.00%
		More than 24 months	1.60%
<b>Other</b> For Securities which have a high yield to redemption relative to government debt Securities issued in the same country, the Regulator will require the Authorised Person: (a) to apply a higher Specific Risk charge to such instruments; or (b) to disallow offsetting for the purpose of defining the extent of General Market Risk between such instruments and any other debt instruments.	4	Any	8% or such other percentage as the Regulator may direct
	5 or 6	Any	12% or such other percentage as the Regulator may direct
	Unrated	Any	8% or such other percentage as the Regulator 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 CRCOM, 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 Regulator has the right to apply to such Securities a Specific Risk percentage higher than 8%.

### A6.2.14 [Reserved]

## General Market Risk

- A6.2.15** (1) Subject to (3), an Authorised Person 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 Person's General Market Risk requirement.
- (2) An Authorised Person must calculate its General Market Risk requirement for each currency by applying one of the following approaches to all currencies, including to the single maturity ladder derived from the currencies identified under (3):
- (a) the simplified framework set out in Rule A6.2.16;
  - (b) the Maturity Method set out in Rule A6.2.17; or
  - (c) with the consent of the Regulator, the Duration Method set out in Rule A6.2.19.
- (3) For currencies in which business is not material, separate maturity ladders for each currency are not required, and the Authorised Person must calculate its General Market Risk requirement by constructing a single maturity ladder and slot, within each appropriate time-band, the net long or short position for each of those currencies after converting them into US \$s.

## Simplified framework

- A6.2.16** In applying the simplified framework, an Authorised Person 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 allocated to their time bands based upon the residual time to maturity; and
    - (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) 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	≤ 1month	0 ≤ 1month	0.00%
	> 1 and ≤ 3months	> 1 and ≤ 3months	0.20%
	> 3 and ≤ 6 months	> 3 and ≤ 6 months	0.40%
	> 6 and ≤ 12 months	> 6 and ≤ 12 months	0.70%
B	> 1 and ≤ 2 years	> 1.0 and ≤ 1.9 years	1.25%
	> 2 and ≤ 3 years	> 1.9 and ≤ 2.8 years	1.75%
	> 3 and ≤ 4 years	> 2.8 and ≤ 3.6 years	2.25%
C	> 4 and ≤ 5 years	> 3.6 and ≤ 4.3 years	2.75%
	> 5 and ≤ 7 years	> 4.3 and ≤ 5.7 years	3.25%
	> 7 and ≤ 10 years	> 5.7 and ≤ 7.3 years	3.75%
	> 10 and ≤ 15 years	> 7.3 and ≤ 9.3 years	4.50%
	> 15 and ≤ 20 years	> 9.3 and ≤ 10.6 years	5.25%
	> 20 years	> 10.6 and ≤ 12.0 years	6.00%
		> 12.0 and ≤ 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

**A6.2.17** 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 A6.2.16;
- (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.

**A6.2.18** 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) 100% 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:



Zone	Time band (m = months, y = years)		Aggregate positions per time band (\$)		Risk percentages	Aggregate positions per time band – weighted (\$) (M = matched, U = unmatched)							
								By time band		By zone		Between zones	
	Coupon ≥3%	Coupon <3%	Long	Short		Long	Short	M	U	M	U	M	U
A	≤ 1m	0 ≤ 1m	100	-50	0.00%	0.00	0.00	0.00	0.00				
	> 1 and ≤ 3m	> 1 and ≤ 3m	200	-100	0.20%	0.40	-0.20	0.20	0.20	0.00	1.30		
	> 3 and ≤ 6 m	> 3 and ≤ 6 m	300	-200	0.40%	1.20	-0.80	0.80	0.40				
	> 6 and ≤ 12 m	> 6 and ≤ 12 m	400	-300	0.70%	2.80	-2.10	2.10	0.70				
B	> 1 and ≤ 2 y	> 1.0 and ≤ 1.9 y	100	-200	1.25%	1.25	-2.50	1.25	-1.25			Zones A&B 1.30	
	> 2 and ≤ 3 y	> 1.9 and ≤ 2.8 y	200	-300	1.75%	3.50	-5.25	3.50	-1.75	0.00	-5.25		
	> 3 and ≤ 4 y	> 2.8 and ≤ 3.6 y	300	-400	2.25%	6.75	-9.00	6.75	-2.25				Zones A&C 0.00
C	> 4 and ≤ 5 y	> 3.6 and ≤ 4.3 y	100	-100	2.75%	2.75	-2.75	2.75	0.00			Zones B&C 3.95	
	> 5 and ≤ 7 y	> 4.3 and ≤ 5.7 y	200	-200	3.25%	6.50	-6.50	6.50	0.00				
	> 7 and ≤ 10 y	> 5.7 and ≤ 7.3 y	300	-100	3.75%	11.25	-3.75	3.75	7.50				
	> 10 and ≤ 15 y	> 7.3 and ≤ 9.3 y	100	-200	4.50%	4.50	-9.00	4.50	-4.50	4.50	8.25		
	> 15 and ≤ 20 y	> 9.3 and ≤ 10.6 y	200	-100	5.25%	10.50	5.25	5.25	5.25				
	> 20 y	> 10.6 and ≤ 12.0 y	300	-300	6.00%	18.00	-18.00	18.00	0.00				

Zone	Time band (m = months, y = years)		Aggregate positions per time band (\$)		Risk percentages	Aggregate positions per time band – weighted (\$) (M = matched, U = unmatched)							
								By time band		By zone		Between zones	
	Coupon ≥3%	Coupon <3%	Long	Short		Long	Short	M	U	M	U	M	U
		> 12 and ≤ 20 y	0	0	8.00%								
		> 20 y	0	0	12.50%								
Total								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) + 100% (\$0.00) = \$13.29

## Duration Method

**A6.2.19** An Authorised Person with the necessary capability may, with the written consent of the Regulator, use the Duration Method, which produces a more accurate measure for General Market Risk than the Maturity Method. An Authorised Person must elect and use the Duration Method on a continuous basis and will be subject to supervisory monitoring of the systems used.

**A6.2.20** 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 in years and the assumed interest rate change in 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
A	≤ 1 month	1.00%
	> 1 and ≤ 3 months	1.00%
	> 3 and ≤ 6 months	1.00%
	> 6 and ≤ 12 months	1.00%
B	> 1.0 and ≤ 1.9 years	0.90%
	> 1.9 and ≤ 2.8 years	0.80%
	> 2.8 and ≤ 3.6 years	0.75%
C	> 3.6 and ≤ 4.3 years	0.75%
	> 4.3 and ≤ 5.7 years	0.70%
	> 5.7 and ≤ 7.3 years	0.65%
	> 7.3 and ≤ 9.3 years	0.60%
	> 9.3 and ≤ 10.6 years	0.60%

Zone	Modified Duration	Assumed move in interest rates
	> 10.6 and ≤ 12.0 years	0.60%
	> 12.0 and ≤ 20.0 years	0.60%
	> 20 years	0.60%

**A6.2.21** For the purposes of this Section Modified Duration is calculated as follows:

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

where:

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

$r$  = yield to maturity

$C_t$  = cash payment in time  $t$

$m$  = total maturity

**A6.2.22** 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;
- 100% 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:

Zone	Time band (m = months, y = years)	Aggregate positions per time band (\$)		Assumed move in interest rates (% pa)	Modified duration (years)	Aggregate positions per time band – weighted (\$) (M = matched, U = unmatched)							
		Long	Short			By time band		By zone		Between zones			
						M	U	M	U	M	U		
A	≤ 1m	100	-50	1.00%	0.00	0.00	0.00	0.00	0.00	0.00	1.30		
	> 1 and ≤ 3m	200	-100	1.00%	0.20	0.40	-0.20	0.20	0.20				
	> 3 and ≤ 6 m	300	-200	1.00%	0.40	1.20	-0.80	0.80	0.40				
	> 6 and ≤ 12 m	400	-300	1.00%	0.70	2.80	-2.10	2.10	0.70				
B	> 1.0 and ≤ 1.9 y	100	-200	0.90%	1.40	1.26	-2.52	1.26	-1.26	0.00	-5.27	Zones A&B	
	> 1.9 and ≤ 2.8 y	200	-300	0.80%	2.20	3.52	-5.28	3.52	-1.76			1.30	
	> 2.8 and ≤ 3.6 y	300	-400	0.75%	3.00	6.75	-9.00	6.75	-2.25				Zones A&C
												0.00	
C	> 3.6 and ≤ 4.3 y	100	-100	0.75%	3.65	2.74	-2.74	2.74	0.00	4.50	8.89	Zones B&C	
	> 4.3 and ≤ 5.7 y	200	-200	0.70%	4.65	6.51	-6.51	6.51	0.00			3.97	
	> 5.7 and ≤ 7.3 y	300	-100	0.65%	5.80	11.31	-3.77	3.77	7.54				

Zone	Time band (m = months, y = years)	Aggregate positions per time band (\$)		Assumed move in interest rates (% pa)	Modified duration (years)	Aggregate positions per time band – weighted (\$) (M = matched, U = unmatched)							
								By time band		By zone		Between zones	
		Long	Short			Long	Short	M	U	M	U	M	U
	> 7.3 and ≤ 9.3 y	100	-200	0.60%	7.50	4.50	-9.00	4.50	-4.50				
	> 9.3 and ≤ 10.6 y	200	-100	0.60%	9.75	11.70	-5.85	5.85	5.85				
	> 10.6 and ≤ 12.0 y	0	0	0.60%	11.00	0.00	0.00	0.00	0.00				
	> 12 and ≤ 20 y	300	-300	0.60%	14.50	26.10	-26.10	26.10	0.00				
	> 20 y	0	0	0.60%	22.00	0.00	0.00	0.00	0.00				
Total								64.10			4.92		

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

**A6.3 Equity Risk Capital Requirement****Guidance**

Section A6.3 presents the method for the calculation of Equity Risk Capital Requirement for the purpose of Rule 5.5.1(b).

**A6.3.1** An Authorised Person which calculates its Equity Risk Capital Requirement in accordance with Rule 5.5.1(b) must apply the Rules in this Section.

**A6.3.2** An Authorised Person 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 Rule A6.3.19;
- (c) calculating an Equity Risk Capital Requirement for each individual position using the standard method in accordance with Rule A6.3.23 or the simplified method in accordance with Rule A6.3.31;
- (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).

**Guidance**

For the purposes of Rule A6.3.2(d), an Authorised Person is required to calculate the applicable Interest Rate Risk Capital Requirement in accordance with Rule A6.2.13 and the other applicable Rules in Section A6.2.

**A6.3.3** (1) For the purposes of Rule A6.3.2(a) an Authorised Person 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 Person 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;



- (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 A6.3.31; 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 A6.3.31.

### Guidance

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

**A6.3.4** An Authorised Person 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 A6.3.12.

**A6.3.5** An Authorised Person 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 A6.3.6 and A6.3.7.

**A6.3.6** An Authorised Person 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.

**A6.3.7** An Authorised Person 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).

**A6.3.8** An Authorised Person must not calculate an Equity Risk Capital Requirement for a Trading Book position in:

- (a) material holdings deducted under Chapter 3 for the purposes of calculating an Authorised Person'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**

**A6.3.9** An Authorised Person 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**

**A6.3.10** An Authorised Person must treat a depository receipt as a notional position in the underlying equity.

**A6.3.11** 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**

**A6.3.12** An Authorised Person 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 Person must calculate an Option Risk Capital Requirement in accordance with Section 5.8.

**Equity Futures and forwards**

**A6.3.13** An Authorised Person 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.

**A6.3.14** An Authorised Person 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.

**A6.3.15** Where Rule A6.3.14(b) applies, an Authorised Person must apply the highest risk percentage to the single notional position that would apply to any one of its constituents.

**A6.3.16** An Authorised Person 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.

**A6.3.17** Where Rule A6.3.16(b) applies, an Authorised Person 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**

**A6.3.18** An Authorised Person 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.

### **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.

**A6.3.19** (1) An Authorised Person 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 180 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.

### **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

Persons must calculate an Interest Rate Risk Capital Requirement for a forward, a Future, an Option or a company issued Warrant.

- A6.3.20** (1) An Authorised Person 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.
- A6.3.21** An Authorised Person must allocate an unlisted equity to the country in which it is issued.

### **The concentration test**

- A6.3.22** An Authorised Person 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**

- A6.3.23** Under the standard method, 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**

- A6.3.24** Specific Risk must be calculated for each net position in an individual equity.
- A6.3.25** The Specific Risk of each individual net equity position is its market value (ignoring the sign) multiplied by 8%.
- A6.3.26** [Reserved]
- A6.3.27** [Reserved]
- A6.3.28** [Reserved]
- A6.3.29** An Authorised Person must calculate General Market Risk on a country-by-country basis.
- A6.3.30** An Authorised Person 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

**A6.3.31** 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:

Position	Percentage risk
Single equities	16%
Broad-based indices (not broken down into constituent equities)	8%
All other indices (not broken down into constituent equities)	16%

**A6.3.32** For the purposes of Rule A6.3.31, 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 twenty 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.

Country	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

**A6.4 Foreign Exchange Risk Capital Requirement****Guidance**

Section A6.4 presents the method for the calculation of Foreign Exchange Risk Capital Requirement for the purpose of Rule 5.6.1(b).

**A6.4.1** An Authorised Person which calculates its Foreign Exchange Risk Capital Requirement in accordance with Rule 5.6.1(b) must apply the Rules in this Section.

**A6.4.2** An Authorised Person 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 A6.4.4; and
- (c) multiplying the overall net open position by the percentage provided in Rule A6.4.5.

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

**A6.4.3** An Authorised Person 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 Authorised Person; and
- (e) any other item representing a profit or loss in Foreign Currencies.

**Measuring the overall net open position**

**A6.4.4** (1) An Authorised Person 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.

**A6.4.5** 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	GBP	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 absolute value of the greater of either the net long currency positions or the net short currency positions (i.e. 300 in this example) 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 Person 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

- A6.4.6**
- (1) An Authorised Person must include interest accrued and accrued expenses as a position.
  - (2) If an Authorised Person 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 Person may 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 structure that is of a non-dealing nature;
    - (b) the Authorised Person has notified the Regulator 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 Person 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.

## **A6.5 Commodities Risk Capital Requirement**

### **Guidance**

Section A6.5 presents the method for the calculation of Commodities Risk Capital Requirement for the purpose of Rule 5.7.1(b).

**A6.5.1** An Authorised Person which calculates its Commodities Risk Capital Requirements in accordance with Rule 5.7.1(b) must apply the Rules in this Section.

### **Calculation of Commodities Risk Capital Requirement**

- A6.5.2** (1) An Authorised Person must calculate its Commodities Risk Capital Requirement by applying the Maturity Ladder approach in Rule A6.5.5 or the Simplified Approach in Rule A6.5.6 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 Person must determine notional commodity positions by converting the commodity Derivatives into notional underlying commodity positions and assigning appropriate maturities in accordance with Rule A6.5.3.

### **Treatment of commodity Derivatives**

**A6.5.3** An Authorised Person 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 Person is paying fixed and receiving floating, and short positions if the Authorised Person is receiving fixed and paying floating; and

- (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.

- A6.5.4** (1) Subject to (2), an Authorised Person must not net positions in different commodities for the purpose of calculating open positions.
- (2) An Authorised Person 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 A6.5.4, 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

- A6.5.5** (1) An Authorised Person 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:

Band	Maturity of Position
1	0 to 1 month
2	1 to 3 months
3	3 to 6 months
4	6 to 12 months
5	1 to 2 years
6	2 to 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 unit spot price for the commodity and then by a spread rate of 1.5%;
- (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 unit 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;
  - (f) calculate the outright charge by multiplying all remaining unmatched positions (long plus short, ignoring the sign) by the unit spot price for the commodity, then by 15%; and
  - (g) sum the totals for Bands 2 to 7 referred to in (b), to reach the total requirement.
- (2) For the purposes of (1)(b), an Authorised Person 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 A6.5.5(1)(a), it follows the steps required by Rule A6.5.5(1)(a) to (g). The spread rate is 1.5%, the carry rate is 0.6% and the outright rate is 15%. The example assumes that the unit spot price for the commodity is \$20

	STEPS →				
Band	A6.5.5(1)(b)	A6.5.5(1)(c)	A6.5.5(1)(d)	A6.5.5(1)(e)	A6.5.5(1)(f)
	Allocate remaining positions to appropriate maturity bands	Match within bands. Each matched amount incurs a <b>spread charge</b>	Carry across bands. Each carried amount incurs a <b>carry charge</b>	Match within band. Each matched amount incurs a <b>spread charge</b>	Remaining unmatched position(s) incur an <b>outright charge</b>
0 and ≤ 1 month					
>1 month and ≤ 3 months	(i) 1100 long (ii) 800 short	→ 800 matched	<div>Unmatched 300 long carried across three bands</div>		
>3 months and ≤ 6 months					
>6 months and ≤ 1 year					
>1 year and ≤2 years	400 short	→ nothing matched	<div>200 long carried across two bands</div>	→ 400 matched	→ 100 long remains unmatched
>2 years and ≤ 3 years					
> 3 years	200 long	→ nothing matched			
<b>Spread charge</b>	(800x\$20x1.5%) + (400x \$20x1.5%) = \$360				
<b>Carry charge</b>	(300x\$20x0.6%x3) + (200x\$20x0.6%x2)= \$156				

<b>Outright charge</b> (100x\$20x15%)	=	<u><b>\$300</b></u>
<b>Total</b>		<b>\$816</b>

### Simplified Approach

**A6.5.6** An Authorised Person 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.

## A6.6 Option Risk Capital Requirement

### Guidance

Section A6.6 presents the method for the calculation of Option Risk Capital Requirement for the purpose of Rule 5.8.1(b).

**A6.6.1** An Authorised Person which calculates its Option Risk Capital Requirement in accordance with Rule 5.8.1(b) must apply the Rules in this Section.

### Calculation of Option Risk Capital Requirement

- A6.6.2** (1) An Authorised Person may use the Simplified Approach set out in Rule A6.6.3 to calculate its Option Risk Capital Requirement only if:
- (a) it does not write Options; or
  - (b) where it writes Options, all written Options are hedged by perfectly matched long positions in exactly the same Options.
- (2) An Authorised Person which writes Options must, unless (1) applies, use the advanced approach known as the Delta-plus method set out in Rule A6.6.5 to calculate its Option Risk Capital Requirement.

### Simplified Approach

**A6.6.3** An Authorised Person 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</li> </ul>

Position	Treatment
	<p>Specific and General Market Risk percentages for the underlying instrument; or</p> <ul style="list-style-type: none"> <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.

- A6.6.4** (1) For the purposes of Rule A6.6.3, 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 A6.6.3, 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 Person 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.

- A6.6.5** (1) An Authorised Person that writes or purchases Options may include Delta-weighted Options positions within the standardised methodology set out in Sections A6.2 to A6.5. Such Options must be reported as a position equal to the market value of the underlying instrument multiplied by the Delta.
- (2) An Authorised Person is also required to measure and Vega 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 timebands, as set out in Section A6.2. 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 Equity Risk Capital Requirement described in Section A6.3. 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 A6.4 to A6.5.

**A6.6.6** An Authorised Person using the Delta-plus method must calculate its Market Risk Capital Requirement for Options by:

- (a) calculating the Delta-weighted position of each Option in accordance with Rule A6.6.7 and adding these Delta-weighted positions to the net positions in the relevant risk category referred in Sections A6.2 to A6.6 for the purpose of calculating the Specific Risk and General Market Risk Capital Requirements;
- (b) calculating the Capital Requirement for Gamma risk of its Option positions (including hedge positions) based on the Options pricing model of the an Authorised Person, in accordance with Rules A6.6.8 to A6.6.9;
- (c) calculating the Capital Requirement for Vega risk of its Option positions (including hedge positions) based on the Options pricing model of an Authorised Person, in accordance with Rule A6.6.10; and
- (d) summing the Capital Requirements determined in (b) and (c).

**A6.6.7** An Authorised Person must calculate its Delta-weighted position for each Option as follows:

Delta-weighted position = Market value of the underlying instrument or commodities  
x Delta

**A6.6.8** In addition to the capital charges referred to in Rule A6.6.5, arising from Delta risk, an Authorised Person must calculate the Gamma 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 A6.2.16;
  - (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%; and
- (c) for the purpose of this calculation the following positions must be treated as the same underlying instrument:
- (i) for interest rates, each timeband as set out in Rule A6.2.16;
  - (ii) for equities and stock indices, each national market;
  - (iii) for foreign currencies and gold, each currency pair and gold; and
  - (iv) for commodities, positions in the same individual commodity as defined in Section A6.5 for Commodities Risk Capital Requirement.

**A6.6.9** An Authorised Person must calculate its Capital Requirement for Gamma risk by:

- (a) calculating the net Gamma impact in respect of each underlying Financial Instrument or commodity by aggregating the individual Gamma impacts for each Option position in respect of that underlying Financial Instrument or commodity (which may be either positive or negative); and
- (b) aggregating the absolute value of the net Gamma impacts that are negative.

### Guidance

1. The underlying Financial Instrument or commodity should be taken to be the asset which would be received if the Option were exercised. In addition, the notional value should be used for items where the market value of the underlying Financial Instrument or commodity could be zero (e.g. caps and floors, swaptions). Certain notional positions in zero-specific-risk Securities do not attract Specific Risk, e.g. interest rate and currency swaps, Forward Rate Agreement (FRA), forward foreign exchange contracts, interest rate Futures and Futures on an interest rate index. Similarly, Options on such zero-specific-risk Securities also bear no Specific Risk. For the purposes of this sub-paragraph:
  - a. the specific and general risk weights in respect of Options on interest rate-related instruments are determined in accordance with Section A6.2;

- b. the specific and general risk weights in respect of Options on equities and equity indices are determined in accordance with Section A6.3;
- c. the risk weight in respect of foreign currency and gold Options is 8%; and
- d. the risk weight in respect of Options on commodities is 15%.

For Options with a residual maturity of more than six months, the strike price should be compared with the forward, and not current, price. Where an Authorised Person is unable to do this, the in-the-money amount would be zero.

2. An Authorised Person which trades in exotic Options (e.g. barriers, digitals) would use either the scenario approach or the Internal Models Approach (IMA) to calculate its Market Risk Capital Requirement for such Options, unless it is able to demonstrate to the Regulator that the Delta-plus method is appropriate. In the case of Options on Futures or forwards, the relevant underlying is that on which the Future or forward is based (e.g. for a bought call Option on a June 3-month bill Future, the relevant underlying is the 3-month bill).

**A6.6.10** An Authorised Person must calculate its Capital Requirement for Vega risk by:

- (a) multiplying the sum of the Vegas for all Option positions in respect of the same underlying Financial Instrument or commodity, as defined in the Rule 5.6.8(c), by a proportional shift in volatility of  $\pm 25\%$ ; and
- (b) aggregating the absolute value of the individual Capital Requirements which have been calculated for Vega risk.

## **A6.7 Collective Investment Fund Risk Capital Requirement**

### **Guidance**

This Section presents the method for the calculation of Collective Investment Fund Risk Capital Requirement for the purpose of Rule 5.9.1(b).

**A6.7.1** An Authorised Person which calculates its Collective Investment Fund Risk Capital Requirement in accordance with Rule 5.9.1(b) must apply the Rules in this Section.

**A6.7.2** An Authorised Person must calculate its Collective Investment Fund Risk Capital Requirement by:

- (a) identifying all applicable positions in Funds within the scope of the requirement, including notional positions derived from certain instruments;
- (b) identifying the positions in Funds which will be subject to the risk Capital Requirements specified under this Section;
- (c) converting on a daily basis net positions in every Fund to the Authorised Person's base currency at the prevailing spot foreign exchange rate;
- (d) calculating a Collective Investment Fund Risk Capital Requirement for each individual position in a Fund; and

- (e) summing the resultant Capital Requirements calculated in (d).

- A6.7.3** (1) For the purposes of Rule A6.7.2, an Authorised Person must calculate its Collective Investment Fund Risk Capital Requirement for all Trading Book positions in Funds, unless they are covered under one of the Fund look through methods and included in the risk Capital Requirement calculations for the relevant underlying Investments or subject to an Option Risk Capital Requirement.
- (2) An Authorised Person must also calculate its Collective Investment Fund Risk Capital Requirement for notional positions arising from Trading Book positions in Options or Warrants on Funds.

### **Calculation of the Collective Investment Fund Risk Capital Requirement**

#### **Guidance**

There are two main approaches for calculating the Collective Investment Fund Risk Capital Requirement. The first approach involves directly calculating a risk Capital Requirement for any position in any Fund. The second approach involves using a look-through method which involves calculating the risk Capital Requirements for the positions or Exposures in underlying assets or Investments of the Fund, using the relevant or applicable risk Capital Requirement calculation methods. As the name suggests, a look-through method involves looking through the Fund to identify the underlying positions and trying to calculate the capital required to address the risk of loss arising from volatility in market prices of such underlying positions.

- A6.7.4** Without prejudice to other provisions in this Section, a position in a Fund is subject to a Collective Investment Fund risk capital charge (General Market Risk and Specific Risk) of 32%, subject to Rules A6.7.5 and A6.7.6.

#### **Look through methods**

- A6.7.5** An Authorised Person may determine the Collective Investment Fund Risk Capital Requirement for positions in Funds, using the standard Collective Investment Fund look-through method, provided the relevant positions meet the criteria set out in Rule A6.7.6.
- A6.7.6** An Authorised Person may use the standard Fund look-through method, only if the positions are in Funds which meet the following eligibility criteria:
- (a) the Fund's prospectus or equivalent document must include:
    - (i) the categories of assets the Fund is authorised to invest in;
    - (ii) if investment limits apply, the relative limits and the methodologies to calculate them;
    - (iii) if leverage is allowed, the maximum level of leverage; and
    - (iv) if investment in OTC financial Derivatives or repo-style transactions are allowed, a policy to limit Counterparty Risk arising from these transactions;

- (b) the Fund must publish half-yearly accounts and annual reports to enable an assessment to be made of the assets and liabilities, income and operations over the reporting period;
- (c) the Units of the Fund are redeemable in cash, out of the Fund's assets, on a daily basis at the request of the Unitholder;
- (d) Investments in the Fund must be segregated from the assets of the Fund Manager; and
- (e) there must be adequate risk assessment, by the investing firm, of the Fund.

#### **A6.7.7** [Reserved]

#### **Standard Collective Investment Fund look through method: General**

**A6.7.8** In the case of an Authorised Person being aware of the underlying assets or Investments of the Fund on a daily basis, the Authorised Person may look through to those underlying Investments in order to calculate the Market Risk Capital Requirement (General Market Risk and Specific Risk) for those positions in accordance with the methods set out in the relevant Section of Chapter 5 for calculating the relevant Market Risk Capital Requirement.

**A6.7.9** In this method, positions in Funds must be treated as positions in the underlying Investments of the Fund. Netting is permitted between positions in the underlying Investments of the Fund and other positions held by the Authorised Person, as long as the Authorised Person holds a sufficient quantity of Units to allow for redemption/creation in exchange for the underlying Investments.

#### **Standard Collective Investment Fund look through method: Index or Basket Funds**

**A6.7.10** (1) An Authorised Person may calculate the risk Capital Requirements for positions in Funds in accordance with the methods set out in various Sections of Chapter 5 applicable to various underlying assets or Investments, on assumed positions representing those necessary to replicate the composition and performance of the externally generated index or fixed basket of equities or debt Securities, subject to the following conditions:

- (a) the Fund's mandate is to replicate the composition and performance of an externally generated index or fixed basket of equities or debt Securities; and
  - (b) a minimum correlation of 0.9 between daily price movements of the Fund and the index or basket of equities or debt Securities it tracks, exists over the previous six month period.
- (2) Correlation as referred to in (1)(b) means the correlation coefficient between daily returns on the Fund and that on the index or basket of equities or debt Securities it tracks.

## **A6.8 Securities Underwriting Risk Capital Requirement**

### **Guidance**

Section A6.8 presents the method for calculating a net Underwriting position or reduced net Underwriting position, which is then included in the calculation of Market Risk Capital Requirements as specified in this Chapter. Section A6.8 also deals with concentration risks.

- A6.8.1** (1) An Authorised Person which calculates its Securities Underwriting Risk Capital Requirement in accordance with Rule 5.10.7(b) must apply the Rules in this Section.
- (2) An Authorised Person which underwrites or sub-underwrites an issue of Securities must, for the purposes of calculating its Market Risk Capital Requirement:
- (a) identify commitments to underwrite or sub-underwrite which give rise to an Underwriting position;
  - (b) identify the time of initial commitment; and
  - (c) calculate the net Underwriting position, reduced net Underwriting position or the net Underwriting Exposure.
- A6.8.2** An Authorised Person must include the net Underwriting position or reduced net Underwriting position where:
- (a) debt Securities are being underwritten;
  - (b) equities are being underwritten; or
  - (c) Warrants are being underwritten.

### **Guidance**

1. Sub-Underwriting is a commitment given by one firm to someone other than the Issuer or seller of the Securities to sub-underwrite all or part of an issue of Securities. The net Underwriting position calculated in Rule A6.8.6 will also be used in calculating the net Underwriting Exposure under Rules A6.8.11 to A6.8.14.
2. The net Underwriting position or reduced net Underwriting position arising from Underwriting or sub-Underwriting a rights or Warrants issue should be calculated using the current market price of the underlying Security for the purposes of the Equity Risk Capital Requirement or Option Risk Capital Requirement. However, the risk Capital Requirements will be limited to the value of the net Underwriting position calculated using the initial issue price of the rights or Warrants. Where there is no market price because the rights or Warrants are in relation to a new class of Securities and the initial price has not been set the net Underwriting position or reduced net Underwriting is the amount of the commitment.

### Commitment to underwrite Securities

- A6.8.3** (1) For the purpose of Rule A6.8.1, an Authorised Person underwrites or sub-underwrites an issue of Securities where:
- (a) it gives a commitment to an Issuer of Securities to underwrite an issue of Securities;
  - (b) in the case of new Securities (as defined in Rule A6.8.4) it gives a commitment to a seller of Securities to underwrite a sale of those Securities;
  - (c) it gives a commitment to a Person, other than the Issuer of Securities or, if (b) applies, the seller of the Securities, to sub-underwrite an issue of Securities; or
  - (d) it is a member of a syndicate or Group that gives a commitment of the type described in (a) to (c).
- (2) Unless a Rule deals with an issue of Securities separately or the context otherwise requires, a provision of Section A6.8 that deals with Underwriting also applies to sub-Underwriting.

### Guidance

Block trades, including bought deals, and private placements are not within the scope of this Chapter because they involve an outright purchase by an Authorised Person of the relevant Securities.

- A6.8.4** For the purposes of Rule A6.8.3(b), an Authorised Person must treat Securities as being new if they are:
- (a) Securities that, prior to the allotment following the Underwriting, were not in issue; or
  - (b) Securities that have not previously been offered for sale or subscription to the public and have not been admitted to trading on a market operated by a Recognised Body or an overseas investment exchange.

### Grey market transactions

- A6.8.5** (1) An Authorised Person that buys and sells Securities before issue is dealing in the grey market for the purposes of this Section.
- (2) The other Rules in Section A6.8 do not apply to an Authorised Person with respect to its dealings in the grey market unless the Authorised Person:
- (a) has an Underwriting commitment to the Issuer in respect of those Securities; or
  - (b) has a sub-Underwriting commitment in respect of those Securities and is using the grey market solely for the purpose of reducing that sub-Underwriting commitment.

- (3) The other Rules in Section A6.8 do not apply to an Authorised Person with respect to its dealings in the grey market if the transaction is undertaken by the proprietary trading part of the Authorised Person or is undertaken for proprietary trading purposes.

### Guidance

In Rule A6.8.5, the grey market is the market in which dealers "buy" and "sell" Securities ahead of issue. In reality the dealers are buying and selling promises to deliver the Securities when issued.

### Calculating the net Underwriting position

**A6.8.6** An Authorised Person 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;
- (c) any allocation of Securities granted or received, arising from the commitment to underwrite the Securities, since the time of initial commitment; and
- (d) in the case of sales in the grey market, as defined in Rule A6.8.5, any sales of the Securities as at the time of initial commitment or since the time of initial commitment is subject, in both cases, to the following conditions:
  - (i) any sales of the Securities as at the time of initial commitment must be confirmed in writing at the time of initial commitment;
  - (ii) sales must be net of any purchases in the grey market; and
  - (iii) any allocation of Securities granted or received, arising from the commitment to underwrite the Securities, since the time of initial commitment.

**A6.8.7** If the allocation of Securities has not been fixed, an Authorised Person must calculate the gross amount of its commitment, for the purpose of Rule A6.8.6, by reference to the maximum amount it has committed to underwrite until the time the allocation is set. An Underwriting commitment may only be reduced under this Rule on the basis of a formal agreement.

### Guidance

Allocations may arise, after date of initial commitment, from the agreement to underwrite. For example, obligations or rights may be allocated to or from the Issuer, the Underwriting Group or syndicate.

### Time of initial commitment

**A6.8.8** (1) Subject to (2), the time of initial commitment is the earlier of:



- (a) in the case of Underwriting, the time the Authorised Person agrees with the Issuer of Securities to underwrite those Securities;
  - (b) in the case of Underwriting falling under Rule A6.8.3(b), the time the Authorised Person agrees with the seller of Securities to underwrite those Securities;
  - (c) in the case of sub-Underwriting, the time the Authorised Person agrees with the Person referred to Rule A6.8.3(c) to sub-underwrite those Securities;
  - (d) in the case of Rule A6.8.3(d), the time the Group or syndicate in question (or a member of that Group or syndicate on behalf of the others) agrees with the Issuer or other Person to whom the commitment is given as referred to in Rule A6.8.3(d) to underwrite or sub-underwrite the Securities in question; or
  - (e) if the firm at that time has a commitment (whether legally or binding or not), the time the price and allocation of the issue or offer are set.
- (2) If an Authorised Person has an irrevocable and unfettered right to withdraw from an Underwriting commitment, exercisable within a certain period, the commitment commences (and thus the time of initial commitment occurs) when that right expires.

### Working day 0

**A6.8.9** For the purposes of Section A6.8, working day 0 is the business day on which a firm that is Underwriting or sub-Underwriting becomes unconditionally committed to accepting a known quantity of Securities at a specified price.

### Guidance

For debt issues and Securities which are issued in a similar manner, working day 0 is the later of the date on which the Securities are allotted and the date on which payment for them is due. For equity issues and Securities which are issued in a similar manner, working day 0 is the later of the date on which the offer becomes closed for subscriptions and the date on which the allocations are made public. For rights issues, working day 0 is the first day after the date on which the offer becomes closed to acceptances for subscription.

### Calculating the reduced net Underwriting position

**A6.8.10** To calculate the reduced net Underwriting position an Authorised Person must apply the reduction factors in the table below to the net Underwriting position calculated under Rule A6.8.6 as follows:

- (a) in respect of debt Securities, an Authorised Person must calculate two reduced net Underwriting positions; one for inclusion in the Authorised Person's interest rate Specific Risk calculation, the other for inclusion in its interest rate General Market Risk calculation; and
- (b) in respect of equities, an Authorised Person must calculate only one reduced net Underwriting position, and then include it in the simplified equity method.

### 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%

### Large Exposures risk from Underwriting Securities: Calculating the net Underwriting Exposure

- A6.8.11** For Large Exposures purposes, the total amount of an Authorised Person's Trading Book Exposures to any Person must include net Underwriting Exposure to that Person.
- A6.8.12** An Authorised Person must include any other Exposures arising out of Underwriting (including any Counterparty Exposures to any sub-underwriters) for the purposes of calculating the total amount of its Trading Book Exposures to a Person for Large Exposures purposes.
- A6.8.13** An Authorised Person, before entering into a new Underwriting commitment, must be able to recalculate the Counterparty Credit Risk capital component to the level of detail necessary to ensure that the firm's Capital Resources Requirement does not exceed the firm's Capital Resources.
- A6.8.14** An Authorised Person must calculate the net Underwriting Exposure to an Issuer by applying the relevant reduction factors in the table below to its net Underwriting position calculated under Rule A6.8.6.

Time	Reduction factor to be applied to net Underwriting position
Initial commitment to working day 0	100%
Working day 0	100%
Working day 1	90%
Working day 2	75%
Working day 3	75%
Working day 4	50%
Working day 5	25%
Working day 6 onwards	0%

**Guidance**

The effect of the Rule and the table above is that there is no concentration limit for net Underwriting.

**Exposures between initial commitment and the end of working day 0.****Risk management**

- A6.8.15** (1) An Authorised Person must take reasonable steps to 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.
- (2) In particular, an Authorised Person must have systems to monitor and control its Underwriting Exposures between the time of the initial commitment and working day one in the light of the nature of the risks incurred in the markets in question.

**Guidance**

An Authorised Person should take reasonable steps to:

- a. allocate responsibility for the management of its Underwriting and sub-Underwriting business;
- b. allocate adequate resources to monitor and control its Underwriting and sub-Underwriting business;
- c. satisfy itself that its systems to monitor Exposure to Counterparties will calculate, revise and update its Exposure to each Counterparty arising from its Underwriting or sub-Underwriting business;
- d. satisfy itself of the suitability of each Person who performs functions for it in connection with the firm's Underwriting and sub-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, on an on-going basis, the capacity of sub-underwriters to meet sub-Underwriting commitments.

**A6.9 Use of internal models for Market Risk****A6.9.1 Criteria for use of internally developed Market Risk models****Guidance****Qualitative standards**

1. Any internal model used for purposes of Chapter 5 of these Rules should be conceptually sound and implemented with integrity and, in particular, all of the following qualitative requirements should be met:
  - a. any internal model used to calculate Capital Requirements for equity risk, interest rate risk, foreign exchange risk or commodities

risk should be closely integrated into the daily risk management process set out in (b) and serve as the basis for reporting risk Exposures to senior management;

- b. the Authorised Person should have a risk control unit that is independent from business trading units and reports directly to senior management. The unit should be responsible for designing and implementing any internal model used for purposes of Chapter 5. The unit should conduct the initial and on-going validation of any internal model used for purposes of Chapter 5. The unit should produce and analyse daily reports on the output of any internal model used for calculating Capital Requirements for position risk, foreign exchange risk and commodities risk, and on the appropriate measures to be taken in terms of trading limits;
- c. the Authorised Person's management body and senior management should be actively involved in the risk control process and the daily reports produced by the risk control unit are reviewed by a level of management with sufficient authority to enforce both reductions of positions taken by individual traders as well as in the Authorised Person's overall risk Exposure;
- d. the Authorised Person should have sufficient numbers of staff skilled in the use of sophisticated internal models, and including the ones used for purposes of Chapter 5, in the trading, risk-control, audit and back-office areas;
- e. the Authorised Person should have established procedures for monitoring and ensuring compliance with a documented set of internal policies and controls concerning the overall operation of its internal models, and including the ones used for purposes of Chapter 5;
- f. any internal model used for purposes of Chapter 5 should have a proven track record of reasonable accuracy in measuring risks;
- g. the Authorised Person should frequently conduct a rigorous programme of stress testing, including reverse stress tests, which encompasses any internal model used for purposes of Chapter 5 and the results of these stress tests should be reviewed by senior management and reflected in the policies and limits it sets. This process should particularly address illiquidity of markets in stressed market conditions, Large Exposures and concentration risks, one way markets, event and jump-to-default risks, non-linearity of products, deep out-of-the-money positions, positions subject to the gapping of prices and other risks that may not be captured appropriately in the internal models. The shocks applied should reflect the nature of the portfolios and the time it could take to hedge out or manage risks under severe market conditions; and
- h. the Authorised Person should conduct, as part of its regular internal auditing process, an independent review of its internal models, and including the ones used for purposes of Chapter 5.

2. The review referred to in h. of Guidance note 1 above, should include the activities both of the business trading units and of the independent risk-control unit. At least once a year, the Authorised Person should conduct a review of its overall risk management process. The review should consider the following:
  - a. the adequacy of the documentation of the risk-management system and process and the organisation of the risk-control unit;
  - b. the integration of risk measures into daily risk management and the integrity of the management information system;
  - c. the process the Authorised Person employs for approving risk-pricing models and valuation systems that are used by front and back-office personnel;
  - d. the scope of risks captured by the risk-measurement model and the validation of any significant changes in the risk-measurement process;
  - e. the accuracy and completeness of position data, the accuracy and appropriateness of volatility and correlation assumptions, and the accuracy of valuation and risk sensitivity calculations;
  - f. the verification process the Authorised Person employs to evaluate the consistency, timeliness and reliability of data sources used to run internal models, including the independence of such data sources; and
  - g. the verification process the Authorised Person uses to evaluate back-testing that is conducted to assess the models' accuracy.
3. As techniques and best practices evolve, Authorised Persons should apply those new techniques and practices in any internal model used for purposes of Chapter 5.

#### **Specification of Market Risk factors**

4. Any internal model used to calculate Capital Requirements for equity position risk, interest rate risk, foreign exchange risk, commodities risk and any internal model for correlation trading should meet all of the following requirements:
  - a. the model must capture accurately reflect, on a continuous basis, all material price risks, including 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; and
  - b. the model should capture a sufficient number of risk factors, depending on the level of activity of the Authorised Person in the respective markets. The risk factors in the model should be sufficient to capture the risks inherent in the Authorised Person's portfolio of on and off-balance sheet trading positions. The

Authorised Person should at least incorporate those risk factors in its model that are incorporated into its pricing model. The risk-measurement model should capture nonlinearities for Options and other products as well as correlation risk and basis risk. Where proxies for risk factors are used they should show a good track record for the actual position held. Although an Authorised Person will have some discretion in specifying the risk factors for its internal models, the Regulator expects that such models will meet the criteria specified in the following paragraphs.

5. Any internal model used to calculate Capital Requirements for position risk, foreign exchange risk or commodities risk should meet all of the following requirements:
  - a. the model should incorporate a set of risk factors corresponding to the interest rates in each currency in which the Authorised Person has interest rate sensitive on or off balance sheet positions. The Authorised Person should model the yield curves using one of a number of generally accepted approaches, for example, by estimating forward rates of zero-coupon yields. For material Exposures to interest-rate risk in the major currencies and markets, the yield curve should be divided into a minimum of six maturity segments, to capture the variations of volatility of rates along the yield curve. The model should also capture the risk of less than perfectly correlated movements between different yield curves. The risk measurement system should incorporate separate risk factors to capture spread risk, for example, between bonds and swaps;
  - b. the model should incorporate risk factors corresponding to gold and to the individual foreign currencies in which the Authorised Person's positions are denominated. For Collective Investment Funds the actual foreign exchange positions of the Fund should be taken into account. Authorised Persons may rely on third party reporting of the foreign exchange position of the Fund, where the correctness of this report is adequately ensured. If an Authorised Person is not aware of the foreign exchange positions of a Fund, this position should be carved out of the model and treated separately;
  - c. the model should use a separate risk factor at least for each of the equity markets in which the Authorised Person 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 relatively 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;
  - d. the model should use a separate risk factor at least for each commodity in which the Authorised Person holds significant positions. The model must also capture the risk of less than



perfectly correlated movements between similar, but not identical, commodities and the Exposure to changes in forward prices arising from Maturity Mismatches. It should also take account of market characteristics, notably delivery dates and the scope provided to traders to close out positions; For more actively traded portfolios, the model should also take account of variation in the "convenience yield" between Derivative positions such as forwards and swaps and cash positions in the commodity; and

- e. the Authorised Person's internal model should conservatively assess the risk arising from less liquid positions and positions with limited price transparency under realistic market scenarios. In addition, the internal model should meet minimum data standards. Proxies should be appropriately conservative and should be used only where available data is insufficient or is not reflective of the true volatility of a position or portfolio.
6. Authorised Persons may, in any internal model used for purposes of Chapter 5, use empirical correlations within risk categories and across risk categories only if the Authorised Person's approach for measuring correlations is sound and implemented with integrity.

#### **Quantitative standards**

7. The Regulator will usually only approve an internal Value-at-Risk (VaR) model or its use when the VaR model meets the following quantitative criteria:
- a. VaR 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 VaR, an instantaneous price shock equivalent to a 10 day movement in prices is to be used, i.e., the minimum "holding period" will be ten trading days;
  - d. an effective historical observation period of at least one year except where a shorter observation period is justified by a significant upsurge in price volatility; and
  - e. its data set is updated by the Authorised Person no less frequently than once every month and is reassessed whenever market prices are subject to material changes.
8. An Authorised Person may use VaR numbers calculated according to shorter holding periods than ten days scaled up to ten days by an appropriate methodology that is reviewed periodically.

#### **Qualitative standards**

9. In addition to the standards outlined under 7 and 8:
- a. no particular type of model is prescribed. So long as each model used captures all the material risks run by the Authorised Person,



the Authorised Person will be free to use models based, for example, on variance-covariance matrices, historical simulations, or Monte Carlo simulations;

- b. an Authorised Person 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;
  - c. an Authorised Person's models should accurately capture the unique risks associated with Options within each of the broad risk categories; and
  - d. an Authorised Person should 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 VaR number measured according to the parameters specified in this Section and (b) an average of the daily VaR measures on each of the preceding 60 business days, multiplied by a multiplication factor.
10. The Regulator will usually set a multiplication factor of 3 that must be used by the Authorised Person 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 Regulator should circumstances require.
11. In addition to the calculation of VaR, an Authorised Person using internal VaR models, an Authorised Person should at least on a weekly basis, calculate a 'Stressed VaR' of the current portfolio, in accordance with the requirements set out in Guidance note 7, with VaR model inputs calibrated to historical data from a continuous 12-month period of significant financial stress relevant to the Authorised Person's portfolio. The choice of such historical data should be subject to at least annual review by the Authorised Person, which should notify the outcome to the Regulator.
12. An Authorised Person using an internal model should calculate Capital Requirement for the relevant risk categories, as the sum of points (a) and (b):
- a. the higher of:
    - i. its previous day's VaR number calculated in accordance with Guidance note 7 of this guidance under A6.9.1; or
    - ii. an average of the daily value-at-risk numbers calculated in accordance with Guidance note 7 of A6.9.1, on each of the preceding 60 business days ( $VaR_{avg}$ ), multiplied by the multiplication factor referred in Guidance note 8 of A6.9.1; plus
  - b. the higher of:
    - i. its latest available stressed-value-at-risk number calculated in accordance with Guidance note 9 of A6.9.1 ( $sVaR_{t-1}$ ); or

- ii. an average of the stressed VaR numbers calculated in accordance with Guidance note 9 of A6.9.1 during the preceding 60 business days ( $sVaR_{avg}$ ), multiplied by the multiplication factor (ms) according to Guidance note 10.

### Regulatory back-testing and multiplication factors

13. The results of the Stressed VaR calculations referred to in Guidance note 11 of A6.9.1 should be scaled up by the multiplication factors given below.
14. The multiplication factor referred to above is defined as the sum of 3 and an addend of between 0 and 1, where that addend should depend on the number of violations for the most recent 250 business days as evidenced by the Authorised Person's back-testing of the VaR as set out in Guidance note 7 above.

Number of violations	addend
Fewer than 5	0.00
5	0.40
6	0.50
7	0.65
8	0.75
9	0.85
10 or more	1.00

15. An Authorised Person should count daily violations on the basis of back-testing on hypothetical and actual changes in the portfolio's value. A violation for this purpose is defined as a one-day change in the portfolio's value that exceeds the related one-day VaR number generated by the Authorised Person's model. For the purpose of determining the addend the number of violations should be assessed at least on a quarterly basis and should be equal to the higher of the number of violations under hypothetical and actual changes in the value of the portfolio.
16. Back-testing on hypothetical changes in the portfolio's value should be based on a comparison between the portfolio's end-of-day value and, assuming unchanged positions, its value at the end of the subsequent day. Back-testing on actual changes in the portfolio's value should be based on a comparison between the portfolio's end-of-day value and its actual value at the end of the subsequent day excluding fees, commissions, and net interest income.
17. The Regulator may in individual cases limit the addend to that resulting from violations under hypothetical changes, where the number of violations under actual changes does not result from deficiencies in the internal model.

18. In order to enable the Regulator to monitor the appropriateness of the multiplication factors on an ongoing basis, the Authorised Person should notify promptly, and in any case no later than within five working days, any violations that result from its back-testing programme.

### **Internal Validation**

19. Authorised Persons should have processes in place to ensure that all their internal models used for purposes of Chapter 5 have been adequately validated by suitably qualified parties independent of the development process to ensure that they are conceptually sound and adequately capture all material risks. The validation should be conducted when the internal model is initially developed and when any significant changes are made to the internal model.

The validation should also be conducted on a periodic basis but especially where there have been any significant structural changes in the market or changes to the composition of the portfolio which might lead to the internal model no longer being adequate. As techniques and best practices for internal validation evolve, Authorised Persons should apply these advances. Internal model validation should not be limited to back-testing, but should, at a minimum, also include the following:

- a. tests to demonstrate that any assumptions made within the internal model are appropriate and do not underestimate or overestimate the risk;
  - b. in addition to regulatory back-testing of programmes, Authorised Persons should carry out their own internal model validation tests, including back-testing, in relation to the risks and structures of their portfolios; and
  - c. the use of hypothetical portfolios to ensure that the internal model is able to account for particular structural features that may arise, for example material basis risks and concentration risks.
20. The Authorised Person should perform back-testing on both actual and hypothetical changes in the portfolio's value.

### **Requirements for modelling Specific Risk**

21. An internal model used for calculating Capital Requirements for Specific Risk and an internal model for correlation trading should meet the following additional requirements:
  - a. it explains the historical price variation in the portfolio;
  - b. it captures concentration in terms of magnitude and changes of composition of the portfolio;
  - c. it is robust to an adverse environment;
  - d. it is validated through back-testing aimed at assessing whether Specific Risk is being accurately captured. If the Authorised Person

performs such back-testing on the basis of relevant sub-portfolios, these must be chosen in a consistent manner;

- e. it captures name-related basis risk and should in particular be sensitive to material idiosyncratic differences between similar, but not identical, positions; and
- f. it captures event risk.

### **Exclusions from Specific Risk models**

- 22. An Authorised Person may choose to exclude from the calculation of its Specific Risk Capital Requirement using an internal model those positions for which it fulfils a Capital Requirement for Specific Risk in accordance with relevant Sections of Chapter 5.
- 23. An Authorised Person may choose not to capture default and migration risks for debt instruments in its internal model where it is capturing those risks through internal models for incremental default and migration risk.

## **A6.9.2 Incremental risk charge (IRC) model**

### **Guidance**

- 1. An Authorised Person that uses an internal model for calculating Capital Requirements for Specific Risk of interest rate risk Exposures should also have an internal incremental default and migration risk (incremental risk charge, or IRC) model in place to capture the default and migration risks of its Trading Book positions that are incremental to the risks captured by the VaR measure as specified in Guidance note 7 of A6.9.1. An Authorised Person should demonstrate that its internal model meets soundness standards comparable to the Internal Ratings Based (IRB) approach for Credit Risk under the assumption of a constant level of risk, and adjusted where appropriate to reflect the impact of liquidity, concentrations, hedging and optionality.

### **Scope of the internal IRC model**

- 2. The internal IRC model should cover all positions subject to a Capital Requirement for specific interest rate risk, including those subject to a 0% Specific Risk capital charge under Rule A6.2.13, but should not cover securitisation positions and  $n^{\text{th}}$ -to-default Credit Derivatives.
- 3. The Authorised Person may, subject to approval by the Regulator, choose to include consistently all listed equity positions and Derivatives positions based on listed equities. The permission will be granted only if such inclusion is consistent with how the Authorised Person internally measures and manages risk.

### **Parameters of the internal IRC model**

- 4. Authorised Persons should use the internal model to calculate a number which measures losses due to default and internal or external ratings migration at the 99.9 % confidence interval over a time horizon of one year. Authorised Persons should calculate this number at least weekly.

5. Correlation assumptions should be supported by analysis of objective data in a conceptually sound framework. The internal model should appropriately reflect Issuer concentrations. Concentrations that can arise within and across product classes under stressed conditions should also be reflected.
6. The internal IRC model should reflect the impact of correlations between default and migration events. The impact of diversification between, on the one hand, default and migration events and, on the other hand, other risk factors should not be reflected.
7. The internal model should be based on the assumption of a constant level of risk over the one-year time horizon, implying that given individual Trading Book positions or sets of positions that have experienced default or migration over their liquidity horizon are re-balanced at the end of their liquidity horizon to attain the initial level of risk. Alternatively, an Authorised Person may choose to consistently use a one-year constant position assumption.
8. The liquidity horizons should be set according to the time required to sell the position or to hedge all material relevant price risks in a stressed market, having particular regard to the size of the position. Liquidity horizons should reflect actual practice and experience during periods of both systematic and idiosyncratic stresses. The liquidity horizon should be measured under conservative assumptions and should be sufficiently long that the act of selling or hedging, in itself, would not materially affect the price at which the selling or hedging would be executed.
9. The determination of the appropriate liquidity horizon for a position or set of positions is subject to a floor of three months.
10. The determination of the appropriate liquidity horizon for a position or set of positions should take into account an Authorised Person's internal policies relating to valuation adjustments and the management of stale positions. When an Authorised Person determines liquidity horizons for sets of positions rather than for individual positions, the criteria for defining sets of positions should be defined in a way that meaningfully reflects differences in liquidity. The liquidity horizons should be greater for positions that are concentrated, reflecting the longer period needed to liquidate such positions. The liquidity horizon for a securitisation warehouse should reflect the time to build, sell and securitise the assets, or to hedge the material risk factors, under stressed market conditions.

### **Recognition of hedges in the internal IRC model**

11. hedges may be incorporated into an Authorised Person's internal model to capture the incremental default and migration risks. Positions may be netted when long and short positions refer to the same Financial Instrument. Hedging or diversification effects associated with long and short positions involving different instruments or different Financial Instruments of the same obligor, as well as long and short positions in different Issuers, may only be recognised by explicitly modelling gross long and short positions in the different instruments. Authorised Persons should reflect the impact of material risks that could occur during the interval between the

hedge's maturity and the liquidity horizon as well as the potential for significant basis risks in hedging strategies by product, seniority in the capital structure, internal or external rating, maturity, vintage and other differences in the instruments. An Authorised Person should reflect a hedge only to the extent that it can be maintained even as the obligor approaches a credit or other event.

12. For positions that are hedged via dynamic hedging strategies, a rebalancing of the hedge within the liquidity horizon of the hedged position may be recognised, provided that the Authorised Person:
  - a. chooses to model rebalancing of the hedge consistently over the relevant set of Trading Book positions;
  - b. demonstrates that the inclusion of rebalancing results in a better risk measurement; and
  - c. demonstrates that the markets for the instruments serving as hedges are liquid enough to allow for such rebalancing even during periods of stress. Any residual risks resulting from dynamic hedging strategies must be reflected in the Capital Requirement.

#### **Additional content of the internal IRC model**

13. The internal model to capture the incremental default and migration risks should reflect the nonlinear impact of Options, structured Credit Derivatives and other positions with material nonlinear behaviour with respect to price changes. The Authorised Person should also have due regard to the amount of model risk inherent in the valuation and estimation of price risks associated with such products.
14. The internal model should be based on data that are objective and up-to-date.
15. As part of the independent review and validation of their internal models used for purposes of this Chapter, an Authorised Person should in particular do all of the following:
  - a. validate that its modelling approach for correlations and price changes is appropriate for its portfolio, including the choice and weights of its systematic risk factors;
  - b. perform a variety of stress tests, including sensitivity analysis and scenario analysis, to assess the qualitative and quantitative reasonableness of the internal model, particularly with regard to the treatment of concentrations. Such tests should not be limited to the range of events experienced historically; and
  - c. apply appropriate quantitative validation, including relevant internal modelling benchmarks.
16. The internal model should be consistent with the Authorised Person's internal risk management methodologies for identifying, measuring, and managing trading risks.



17. Authorised Persons should document their internal models so that their correlation and other modelling assumptions are transparent to the Regulator.
18. The internal model should conservatively assess the risk arising from less liquid positions and positions with limited price transparency under realistic market scenarios. In addition, the internal model should meet minimum data standards. Proxies should be appropriately conservative and may be used only where available data is insufficient or is not reflective of the true volatility of a position or portfolio.

#### **Not fully compliant IRC approaches**

19. If an Authorised Person uses an internal model to capture incremental default and migration risks that does not comply with all requirements specified in Guidance notes 4 to 18 of A6.9.2, but that is consistent with the Authorised Person's internal methodologies for identifying, measuring and managing incremental default and migration risks, it should be able to demonstrate that its internal model results in a Capital Requirement that is at least as high as if it were based on a model in full compliance with the requirements of the Guidance notes referred above. The Regulator will review compliance with the previous sentence at least annually.

### **A6.9.3 Internal model for correlation trading**

#### **Guidance**

1. The Regulator will grant permission to use an internal model for calculating the Capital Requirement for a correlation trading portfolio only to Authorised Persons that have obtained the Regulator's approval to use an internal model for Specific Risk of interest rate risk Exposures and that meet the requirements for internal models specified earlier in this Section.
2. Authorised Persons should use this internal model to calculate a number which adequately measures all price risks at the 99.9 % confidence interval over a time horizon of one year under the assumption of a constant level of risk, and adjusted where appropriate to reflect the impact of liquidity, concentrations, hedging and optionality. Authorised Persons should calculate this number at least weekly.
3. The following risks should be adequately captured by the model referred to in Guidance note 1 of A6.9.3:
  - a. the cumulative risk arising from multiple defaults, including different ordering of defaults, in tranching products;
  - b. credit spread risk, including the Gamma and cross-Gamma effects;
  - c. volatility of implied correlations, including the cross effect between spreads and correlations;
  - d. basis risk, including both of the following:
    - i. the basis between the spread of an index and those of its constituent single names; and



- ii. the basis between the implied correlation of an index and that of bespoke portfolios;
  - e. recovery rate volatility, as it relates to the propensity for recovery rates to affect tranche prices;
  - f. to the extent the comprehensive risk measure incorporated benefits from dynamic hedging, the risk of hedge slippage and the potential costs of rebalancing such hedges; and
  - g. any other material price risks of positions in the correlation trading portfolio.
4. An Authorised Person should use sufficient market data within the model referred to in Guidance note 1 in order to ensure that it fully captures the salient risks of those Exposures in its internal approach in accordance with the requirements set out in this guidance in A6.9.3. It should be able to demonstrate to the Regulator through back testing or other appropriate means that its model can appropriately explain the historical price variation of those products.
  5. The Authorised Person should have appropriate policies and procedures in place in order to separate the positions for which it holds permission to incorporate them in the Capital Requirement in accordance with this guidance in A6.9.3 from other positions for which it does not hold such permission.
  6. With regard to the portfolio of all the positions incorporated in the model referred to in Guidance note 1, the Authorised Person should regularly apply a set of specific, predetermined stress scenarios. Such stress scenarios should examine the effects of stress to default rates, recovery rates, credit spreads, basis risk, correlations and other relevant risk factors on the correlation trading portfolio. The Authorised Person should apply stress scenarios at least weekly and report at least quarterly to the Regulator the results, including comparisons with the Authorised Person's Capital Requirement in accordance with this point. Any instances where the stress test results materially exceed the Capital Requirement for the correlation trading portfolio should be reported to the Regulator in a timely manner.
  7. The internal model should conservatively assess the risk arising from less liquid positions and positions with limited price transparency under realistic market scenarios. In addition, the internal model should meet minimum data standards. Proxies should be appropriately conservative and may be used only where available data is insufficient or is not reflective of the true volatility of a position or portfolio.

### **Stress testing**

- A6.9.4** (1) For the purposes of Rule 5.11.3, an Authorised Person's internal model must meet the following criteria:
- (a) the Authorised Person'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 Person'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 Person could be exposed. Qualitative criteria must emphasise that two major goals of stress testing are to evaluate the capacity of the Authorised Person's capital to absorb potential large losses and to identify steps the Authorised Person can take to reduce its risk and conserve capital; and
  - (c) the Authorised Person must combine the use of supervisory stress scenarios with stress tests developed by the Authorised Person itself to reflect their Specific Risk characteristics. Information is required in three broad areas:
    - (i) supervisory scenarios requiring no simulations by the Authorised Person - the Authorised Person 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 Person's internal measurement system;
    - (ii) supervisory scenarios requiring a simulation by the Authorised Person – the Authorised Person must subject its portfolio to a series of simulated stress scenarios and provide the Regulator with the results (e.g., the sensitivity of the Authorised Person's Market Risk Exposure to changes in the assumptions about volatilities and correlations); and
    - (iii) scenarios developed by the Authorised Person itself to capture the specific characteristics of its portfolio.
- (2) In addition to the scenarios prescribed under (1)(c), an Authorised Person 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 Person must also provide the Regulator 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.

## APP7 CALCULATING THE OPERATIONAL RISK CAPITAL REQUIREMENT

### Guidance

1. Section 6.11 of these Rules provides that an Authorised Person in Categories 1, 2, 3A and 5 must use the Basic Indicator Approach to calculate its Operational Risk Capital Requirement, unless the firm has approval from the Regulator to use the Standardised Approach or Alternative Standardised Approach. In this App7:
  - a. the Basic Indicator Approach is prescribed in Section A7.1;
  - b. the Standardised Approach is prescribed in Section A7.2; and
  - c. the Alternative Standardised Approach is prescribed in Section A7.3.
2. The application of various components of the rules on Operational Risk to Authorised Persons with a Financial Services Permission to carry out various Regulated Activities is detailed in the table below:

Regulated Activities	Prudential Category	Capital requirement	Systems and controls requirement	PII cover
Accepting Deposits	1	Yes	Yes	No
Providing Credit	2	Yes	Yes	No
Dealing in Investments as Principal (not as a Matched Principal)	2	Yes	Yes	No
Dealing in Investments as Principal (only as a Matched Principal)	3A	Yes	Yes	No
Dealing in Investments as Agent	3A	Yes	Yes	No
Acting as the Trustee of an Investment Trust	3B	No	Yes	Yes
Providing Custody	3B or 3C	No	Yes	Yes
Providing Trust Services	3C or 4	No	Yes	Yes
Managing Assets	3C	No	Yes	Yes
Managing a Collective Investment Fund	3C	No	Yes	Yes

Regulated Activities	Prudential Category	Capital requirement	Systems and controls requirement	PII cover
Managing a Profit Sharing Investment Account which is a PSIAr	3C	No	Yes	Yes
Providing Money Services	3C	No	Yes	Yes
Arranging Credit	4	No	Yes	Yes
Arranging Deals in Investments	4	No	Yes	Yes
Advising on Investments or Credit	4	No	Yes	Yes
Arranging Custody	4	No	Yes	No
Insurance Intermediation	4	No	Yes	Yes
Insurance Management	4	No	Yes	Yes
Acting as the Administrator of a Collective Investment Fund	4	No	Yes	Yes
Operating a Multilateral Trading Facility or Organised Trading Facility	4	No	Yes	Yes
Islamic Financial Business	5	Yes	Yes	No
Shari'a-compliant Regulated Activities	5	Yes	Yes	No
Managing a Profit Sharing Investment Account which is a PSIAu	5 or 1	Yes	Yes	No

## A7.1 Basic Indicator Approach

- A7.1.1** (1) (a) (i) An Authorised Person which uses the Basic Indicator Approach must calculate its Operational Risk Capital Requirement equal to the average over the previous three years of a fixed percentage (denoted by alpha) of positive annual gross income.

- (ii) For any year that annual gross income is zero or negative, that year must be excluded from both the numerator and the denominator in the calculation.
- (b)
  - (i) Where an Authorised Person does not have sufficient data to meet the three-year requirement in (a) it must use its forecast annual gross income projections for that part of the three year time period for which it does not have sufficient historical data.
  - (ii) The Authorised Person must start using historical data as soon as it is available.
- (2) In (1), if the figure for annual gross income in any of the previous three years is zero or negative an Authorised Person must exclude such amounts from the calculation of the average.
- (3) The Operational Risk Capital Requirement in (1) must be calculated according to the following formula:

$$K_{BIA} = [\sum(GI_1 \dots n * \alpha)] / n$$

where:

$K_{BIA}$  = the Operational Risk Capital Requirement under the Basic Indicator Approach

$GI$  = the gross annual income, where positive, over the previous three years

$n$  = number of the previous three years for which gross income is positive

$\alpha$  = 15%,

- (4) For the purpose of (1), "gross income" is net interest income plus net non-interest income and must:
  - (a) be gross of any provisions (e.g. for unpaid interest);
  - (b) be gross of operating expenses, including fees paid to outsourcing service providers;
  - (c) exclude realised profits/losses from the sale of Securities in the Non-Trading Book; and
  - (d) exclude extraordinary or irregular items as well as income derived from insurance recoveries.

### Guidance

1. In (a), the three-year average should be calculated on the basis of the last three yearly observations at the end of the Authorised Person's financial year. When audited figures are not available, business estimates may be used.
2. As an example of the approach to be used for (a)(ii), if an Authorised Person has two positive yearly gross incomes of \$20 each and the final yearly

observation shows a negative figure of \$5, then the average should be calculated as \$20 being \$40 (the sum of the positive figures) divided by 2 (the number of years for which the figures are positive).

3. The circumstances in (b) may arise, for example, where an Authorised Person is a start-up, is part of a merger or it acquires or divests itself of a significant business unit.
4. Net interest income in A7.1.1(4) is the interest income minus interest expense. Guidance on what constitutes interest income and interest expense can be found in the PRU rules.
5. Net non-interest income in A7.1.1(4) includes the income from fees and commissions, net income from trading Securities, net income from Investment Securities, income from Islamic Contracts and other operating income minus fee and commission expense. Guidance on non-interest income can be found in the PRU rules.
6. In A7.1.1(4)(ii), outsourcing fees paid by the Authorised Person should be excluded whereas any outsourcing fee received by the Authorised Person should be included as part of the gross income.
7. When income from revaluation of trading items is included in the income statement, such revaluation income should be included in the calculation of the gross income.

## **A7.2 Standardised Approach**

### **A7.2.1** An Authorised Person which uses the Standardised Approach:

- (a)
  - (i) subject to (b), must calculate its Operational Risk Capital Requirement in accordance with Rule A7.2.2;
  - (ii) where an Authorised Person does not have sufficient data to meet the three-year requirement in (i) it must use its forecast annual gross income projections for that part of the three year time period for which it does not have sufficient historical data, and must start using historical data as soon as it is available;
- (b)
  - (i) subject to (ii), may in any given year offset negative gross income in any business line against positive gross income in other business lines without limit; and
  - (ii) must input to the numerator a value of zero if the aggregate annual gross income across all business lines within a given year is negative.

### **A7.2.2** An Authorised Person which uses the Standardised Approach must calculate its Operational Risk Capital Requirement, $K_{SA}$ , according to the following formula:

$$K_{SA} = \{\sum \text{years } 1-3 \max[\sum (GI_{1-8} * B_{1-8}), 0]\} / 3$$

where:

$K_{SA}$  = the capital charge under the Standardised Approach

$GI_{1-8}$  = annual gross income in a given year, as defined above in the Basic Indicator Approach, for each of the eight business lines

$B_{1-8}$  = a fixed percentage, termed a “beta factor”, for each of the eight business lines, set out in Rule A7.2.3.

**A7.2.3** An Authorised Person which uses the Standardised Approach must calculate its Operational Risk Capital Requirement using the following beta factors:

Business Line	Beta factor
Corporate finance	18%
Trading and sales	18%
Retail banking	12%
Commercial banking	15%
Payment and settlement	18%
Agency services	15%
Asset management	12%
Retail brokerage	12%

### Guidance

The gross income is measured for each business line, not the whole institution, i.e. in corporate finance, the indicator is the gross income generated in the corporate finance business line.

## A7.3 Alternative Standardised Approach

**A7.3.1** An Authorised Person which uses the Alternative Standardised Approach must calculate its Operational Risk Capital Requirement in accordance with the Standardised Approach in Section A7.2 as modified by replacing annual gross income for its retail banking and commercial banking business lines with loans and advances multiplied by a fixed factor 'm'.

**A7.3.2** Subject to Rule A7.3.4, an Authorised Person which uses the Alternative Standardised Approach must calculate its Operational Risk Capital Requirement for its retail banking business line according to the following formula:

$$KRB = BRB \times m \times LARB$$

where:

$KRB$  = the Capital Requirement for the retail banking business line

$BRB$  = the beta factor for the retail banking business line

$LARB$  = total outstanding retail loans and advances (non-risk weighted and gross of provisions), averaged over the past three years

$m$  = 0.035

**A7.3.3** Subject to Rule A7.3.4, an Authorised Person which uses the Alternative Standardised Approach must calculate its Operational Risk Capital Requirement for its commercial banking business line according to the following formula:



$$KCB = BCB \times m \times LACB$$

where:

*KCB* = the Capital Requirement for the commercial banking business line

*BCB* = the beta factor for the commercial banking business line

*LACB* = total outstanding commercial banking loans and advances (non-risk weighted and gross of provisions), averaged over the past three years

*m* = 0.035

**A7.3.4** An Authorised Person may, in calculating its Operational Risk Capital Requirement under Rule A7.3.1:

- (a) aggregate retail and commercial banking using a single beta of 15%; or
- (b) if it is unable to disaggregate gross income in its six other business lines, aggregate the total gross income for these six business lines using a beta of 18%, with negative gross income treated as described in the Standardised Approach.

#### Guidance

1. For the purposes of the Alternative Standardised Approach, total loans and advances in the retail banking business line consist of the total drawn amounts in the following credit portfolios: retail, SMEs treated as retail, and purchased retail receivables.
2. For commercial banking, total loans and advances consist of the drawn amounts in the following credit portfolios: corporate, sovereign, bank, specialised lending, SMEs treated as corporate and purchased corporate receivables. The book value of Securities held in the Non-Trading Book should also be included.
3. The three year average should be calculated on the basis of the last three yearly observations at the end of the Authorised Person's financial year. When audited figures are not available, business estimates may be used.
4. Where an Authorised Person does not have sufficient annual gross income data to meet the three year requirement (e.g. a start-up) for the Standardised Approach, or on the level of loans and advances for the Alternative Standardised Approach, it may use its forward-looking projections for all or part of the three year time period.
5. In accordance with Rule 6.11.3, an Authorised Person seeking to apply the Standardised Approach or the Alternative Standardised Approach must develop specific policies and have documented criteria for mapping gross income for current business lines and activities into the Standardised Approach or the Alternative Standardised Approach. The criteria must be reviewed and adjusted for new or changing business activities as appropriate. The principles for business line mapping are set out below.

### Principles for business line mapping

6. All activities should be mapped into the eight level 1 business lines in a mutually exclusive and jointly exhaustive manner.
7. Any activity which cannot be readily mapped into the business line framework, but which represents an ancillary function to an activity included in the framework, should be allocated to the business line it supports. If more than one business line is supported through the ancillary activity, an objective mapping criteria should be used.
8. When mapping gross income, if an activity cannot be mapped into a particular business line then the business line yielding the highest charge should be used. The same business line equally applies to any associated ancillary activity.
9. An Authorised Person may use internal pricing methods to allocate gross income between business lines, provided that total gross income for the firm (as would be recorded under the Basic Indicator Approach) still equals the sum of gross income for the eight business lines.
10. The mapping of activities into business lines for Operational Risk capital purposes should be consistent with the definitions of business lines used for regulatory capital calculations in other risk categories, i.e. credit and Market Risk. Any deviations from this principle should be clearly motivated and documented.
11. The mapping process used should be clearly documented. In particular, written business line definitions should be clear and detailed enough to allow third parties to replicate the business line mapping. Documentation should, among other things, clearly motivate any exceptions or overrides and be kept on record.
12. Processes should be in place to define the mapping of any new activities or products and the mapping process to business lines should be subject to independent review.

**Table – Mapping of Business Lines**

Level 1	Level 2	Activity Groups
Corporate Finance	Corporate Finance	Mergers and acquisitions, Underwriting, privatisations, securitisation, research, debt (government, high yield), equity, syndications, IPO, secondary private placements.
	Municipal/Government Finance	
	Merchant Banking	
	Advisory Services	
Trading and Sales	Sales	

Level 1	Level 2	Activity Groups
	Market Making	Fixed income, equity, foreign exchanges, commodities, credit, funding, own position Securities, lending and repos, brokerage, debt, prime brokerage.
	Proprietary Positions	
	Treasury	
Retail Banking	Retail Banking	Retail lending and Deposits, banking services, trust and estates.
	Private Banking	Private lending and Deposits, banking services, trust and estates, investment advice.
	Card Services	Merchant/commercial/ corporate cards, private labels and retail.
Commercial Banking	Commercial Banking	Project finance, real estate, export finance, trade finance, factoring, leasing, lending, guarantees, bills of exchange.
Payment and Settlement	External Clients	Payments and collections, funds transfer, clearing and Settlement.  Note: Payment and settlement losses related to an Authorised Person's own activities would be incorporated in the loss experience of the affected business line.
Agency Services	Custody	Escrow, depository receipts, Securities lending (customers) corporate actions.
	Corporate Agency	Issuer and paying agents.
	Corporate Trust	n/a

Level 1	Level 2	Activity Groups
Asset Management	Discretionary Fund Management	Pooled, segregated, retail, institutional, closed, open, private Equity.
	Non-Discretionary Fund Management	Pooled, segregated, retail, institutional, closed, open.
Retail Brokerage	Retail Brokerage	Execution and full service.

**APP8 NOT USED**

**APP9 NOT USED**

**APP10 LIQUIDITY****A10.1 Application for a global liquidity concession**

- A10.1.1** (1) This Rule applies to an Authorised Person carrying on business in or from the ADGM through a Branch that applies for a global liquidity concession under Rule 9.3.2.
- (2) The Authorised Person must demonstrate to the Regulator that:
- (a) its Branch complies with all applicable liquidity systems and controls requirements in section 9.2;
  - (b) its head office is established in a jurisdiction where there are no legal constraints imposed by the home supervisor or any other authority on the provision of liquidity to its Branch; and
  - (c) its head office is subject to equivalent or more restrictive liquidity requirements, than those imposed by the Regulator.
- (3) The Regulator may, when considering an application from the Authorised Person for a global liquidity concession, impose additional or alternative conditions to those specified in (2) or disapply a condition in (2).

**Guidance**

1. An application for a global liquidity concession pursuant to Rule 9.3.2 should include at least the following:
  - a. a clear description of the home supervisor's requirements for managing, monitoring and controlling liquidity risk;
  - b. a clear description of the systems and controls used by the head office to ensure the adequacy of the Branch's liquidity;
  - c. a written assurance from the Authorised Person's head office that it will:
    - i. ensure that adequate liquidity is available at all times to support the Branch;
    - ii. notify the Regulator, at the same time as it notifies its home supervisor, of any material issues concerning its Exposure to Liquidity Risk and issues in relation to its compliance with applicable liquidity limits, including its liquidity coverage ratio; and
    - iii. in the event of a liquidity crisis, provide the Regulator with all relevant information on the whole Authorised Person's liquidity, and a list of any known constraints on the head office, legal or otherwise, providing the Branch with liquidity.
  - d. a notification from the Authorised Person's home supervisor:

- i. expressing no objection to the Branch obtaining the Regulator's liquidity concession or acknowledging the Branch application to the Regulator for a global liquidity concession; and
  - ii. providing information about, and confirming, the quality of Liquidity Risk systems and controls and the liquidity Exposures at the Authorised Person's head office.
2. Under Rule A10.1.1(2)(b), the Regulator will consider liquidity transfer restrictions (e.g. ring-fencing measures, non-convertibility of local currency, foreign exchange controls) imposed under applicable laws, regulations or supervisory requirements in jurisdictions in which a banking group operates which affect the availability of liquidity by inhibiting the transfer of HQLA and fund flows within the Group.

**A10.1.2 (1)** An Authorised Person that has been granted a global liquidity concession must provide the Regulator with ongoing assurance about its Liquidity Risk by:

- (a) submitting to the Regulator at least quarterly a copy of the LCR calculation for the Authorised Person, as submitted by its head office to its home supervisor;
  - (b) notifying the Regulator immediately of the results of every assessment which its home supervisor conducts which relates to the quality of liquidity systems and controls at its head office;
  - (c) notifying the Regulator in writing immediately of any adverse finding or action taken by its home supervisor;
  - (d) notifying the Regulator in writing immediately of any potential change in the Branch funding strategy, business model or material potential change in its balance sheet structure; and
  - (e) notifying the Regulator in writing immediately of any changes relating to its compliance with the conditions referred to in Rule A10.1.1.
- (2) The Regulator may at any time, based on its assessment of the Liquidity Risk Exposures of an Authorised Person, by written notice adjust or exclude any of the requirements in (1), impose additional requirements or cancel the global liquidity concession granted to the Authorised Person.

## **A10.2 The Liquidity Coverage Ratio**

### **Guidance**

1. The objective of the LCR is to promote short-term resilience of an Authorised Person's Liquidity Risk profile. The LCR aims to ensure that an Authorised Person maintains an adequate level of unencumbered HQLA that can be converted into cash to meet its liquidity needs for a 30 calendar day period under a severe liquidity stress scenario.
2. The LCR is calculated under Rule 9.3.5 using the following formula:



$$\text{LCR} = (\text{Value of stock of HQLA}) / (\text{Total Net Cash Outflows over the next 30 calendar days})$$

3. The LCR has two components:
  - a. Value of the stock of HQLA in stressed conditions; and
  - b. Total Net Cash Outflows, calculated according to the scenario parameters outlined in this section.
4. The stress scenario entails both institution-specific and systemic shocks including:
  - a. the run-off of a proportion of retail Deposits;
  - b. a partial loss of unsecured wholesale funding capacity;
  - c. a partial loss of secured, short-term financing with certain Collateral and Counterparties;
  - d. additional contractual outflows that would arise from a downgrade in the Authorised Person's public credit rating, where applicable, by up to and including three notches, including Collateral posting requirements;
  - e. increases in market volatility that affect the quality of Collateral or potential future Exposure of Derivative positions and so require larger Collateral haircuts or additional Collateral, or lead to other liquidity needs;
  - f. unscheduled draws on committed but unused credit and liquidity facilities that the Authorised Person has provided to its clients; and
  - g. the potential need for the Authorised Person to buy back debt or honour non-contractual obligations to mitigate reputational risk.

**A10.2.1** An Authorised Person must calculate its LCR on an ongoing basis and separately for each significant currency. An Authorised Person must report to the Regulator its aggregate LCR calculation in \$USD.

#### **Guidance**

A currency is considered significant if the aggregate liabilities denominated in that currency amount to 5% or more of the Authorised Person's total liabilities.

#### **High Quality Liquid Assets (HQLA)**

##### **Guidance**

Assets that meet the conditions in Rules A10.2.2 to A10.2.9 are considered to be HQLA. Those assets are considered to be HQLA as they can be converted easily and immediately into cash at little or no loss of value. To qualify as HQLA, assets should be liquid in markets during a time of stress. In determining whether or not the market for an asset can be relied upon to raise liquidity during a time of stress, the following factors should be taken into account:

1. fundamental characteristics, for example:
  - a. low risk: high credit standing of the Issuer and a low degree of subordination, low duration, low legal risk, low inflation risk, denomination in a convertible currency with low foreign exchange risk;
  - b. ease and certainty of valuation;
  - c. low correlation with risky assets, not subject to wrong-way risk; and
  - d. listing on a developed and recognised exchange.
2. market-related characteristics, for example:
  - a. active and sizeable market, including active outright sale or repo markets at all times. This can be demonstrated through:
    - i. historical evidence of market breadth and market depth (low bid-ask spreads, high trading volumes, large and diverse number of market participants); or
    - ii. existence of robust market infrastructure (presence of multiple committed market makers);
  - b. low price volatility, including historical evidence of relative stability of market terms (e.g. prices and haircuts) and volumes during stressed periods; or
  - c. 'flight to quality', i.e. that historically the market has shown a tendency to move into these types of high quality assets in a systemic crisis.

### **HQLA – general operational requirements**

**A10.2.2** To be eligible as HQLA, assets in the portfolio of HQLA must be appropriately diversified in terms of type of assets, type of Issuer and specific Counterparty or Issuer.

**A10.2.3** To be eligible as HQLA, assets must meet the following requirements:

- (a) the assets must be under the control of the specific function or functions charged with managing the liquidity of the Authorised Person which must have the continuous authority and legal and operational capability to liquidate any asset in the stock; and
- (b) a representative portion of the assets in the stock of HQLA must be liquidated periodically and at least annually by the Authorised Person to test its access to the market, the effectiveness of its processes for liquidation, the availability of the assets, and to minimise the risk of negative signalling during a period of actual stress.

**A10.2.4** To be eligible as HQLA, an asset must also meet the following requirements:

- (a) the asset must be unencumbered and free of legal, regulatory, contractual or other restrictions that affect the ability of the Authorised Person to liquidate, sell, transfer, or assign the asset;

- (b) the asset must not be pledged, either explicitly or implicitly, to secure, collateralise or credit-enhance any transaction, nor be designated to cover operational costs (such as rents and salaries); and
- (c) an asset received in a reverse repo or Securities Financing Transactions that is held at the Authorised Person, is eligible for inclusion in the stock of HQLA only if the asset has not been rehypothecated and is legally and contractually available for the Authorised Person's use.

### **Guidance**

1. The requirements in Rules A10.2.2 to A10.2.4 are intended to ensure that the stock of HQLA is managed in such a way that the Authorised Person can, and is able to demonstrate that it can, immediately use the assets as a source of contingent funds that is available to convert into cash to fill funding gaps between cash inflows and outflows at any time during the 30-day stress period, with no restriction on the use of the liquidity generated.
2. Under Rule A10.2.3(a), the control of the HQLA may be evidenced either by:
  - a. maintaining assets in a separate pool managed by the identified liquidity management function (typically the treasurer) with the sole intent to use it as a source of contingent funds; or
  - b. demonstrating that the relevant function can liquidate the asset at any point in the 30-day stress period and that the proceeds are available to the function throughout the 30-day stress period without directly conflicting with a stated business or risk management strategy.
3. Operational capability to liquidate assets referred to in Rule A10.2.3(b), requires procedures and appropriate systems to be in place. This includes providing the liquidity management function with access to all necessary information to liquidate any asset at any time. Liquidation of the asset should be executable operationally within the standard settlement period for the asset class in the relevant jurisdiction.

### **Caps on different types of HQLA**

- A10.2.5** (1) Assets eligible to be included in the stock of HQLA for the purpose of the LCR calculation are classified under the following two categories:
- (a) Level 1 HQLA, consisting of the highest quality and most liquid assets; and
  - (b) Level 2 HQLA, including Level 2A HQLA and Level 2B HQLA, consisting of other High Quality Liquid Assets.
- (2) When calculating the total stock of HQLA, an Authorised Person must apply the following caps in respect of each category of assets:
- (a) Level 1 HQLA can be included in the total stock of HQLA without any limit (i.e. up to 100% of HQLA);
  - (b) Total Level 2 HQLA, including both Level 2A HQLA and Level 2B HQLA, can comprise only up to 40% of the total stock of HQLA; and

- (c) Level 2B HQLA can comprise only up to 15% of the total stock of HQLA within the overall 40% limit on Level 2 HQLA in (b).
- (3) The caps on Level 2 HQLA and Level 2B HQLA must be determined after applying the haircuts required under Rules A10.2.7 and A10.2.8, and after unwinding the amounts of HQLA involved in short-term secured funding, secured lending and Collateral swap transactions maturing within 30 calendar days that involve the exchange of HQLA.
- (4) The assets to be included in each category of HQLA must be restricted to assets being held or owned by the Authorised Person on the first day of the stress period, irrespective of their residual maturity.

### Guidance

- 1. The following Guidance is intended to illustrate how Rule A10.2.5 should be applied in practice.
- 2. Under Rule A10.2.5(3) the adjusted amounts of HQLA should be calculated as the amount of HQLA that would result after unwinding those short-term secured funding, secured lending and Collateral swap transactions that involve the exchange of any HQLA for any other HQLA.
- 3. The calculation of the stock of HQLA under Rule A10.2.5 can be expressed as the following formula:

$$\text{Stock of HQLA} = \text{Level 1 HQLA} + \text{Level 2A HQLA} + \text{Level 2B HQLA} - \text{Adjustment for 15\% cap} - \text{Adjustment for 40\% cap}$$

Where:

- a. Adjustment for 15% cap =  $\text{Max} (\text{Adjusted Level 2B HQLA} - 15/85 \times (\text{Adjusted Level 1 HQLA} + \text{Level 2A HQLA}), \text{Adjusted Level 2B HQLA} - 15/60 \times \text{Adjusted Level 1 HQLA}, 0)$
- b. Adjustment for 40% cap =  $\text{Max} ((\text{Adjusted Level 2A HQLA} + \text{Adjusted Level 2B HQLA} - \text{Adjustment for 15\% cap}) - 2/3 \times \text{Adjusted Level 1 HQLA}, 0)$

### Level 1 HQLA

- A10.2.6** (1) Level 1 HQLA must be valued at market value.
- (2) Level 1 HQLA consists of:
- (a) banknotes and coin;
  - (b) central bank reserves, to the extent that such reserves are capable of being drawn down immediately in times of stress;
  - (c) marketable Securities representing claims on or claims guaranteed by sovereigns, central banks, Public Sector Entities (PSEs), the Bank for International Settlements, the International Monetary Fund, the European Central Bank and European Commission or

Multilateral Development Banks (MDBs), and that satisfy all of the following conditions:

- (i) they are assigned a zero % risk-weight according to Chapter 4 and App4 of this Rulebook;
  - (ii) they are traded in large, deep and active repo or cash markets characterised by a low level of concentration;
  - (iii) they have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions; and
  - (iv) they are not an obligation of a Financial Institution or any of its associated entities;
- (d) in the case of sovereigns that are not eligible for a risk-weight of zero, sovereign, or central bank debt Securities issued in domestic currencies by the sovereign or central bank in the country in which the Liquidity Risk is being taken or in the Authorised Person's home jurisdiction, where those Securities satisfy all of the conditions in paragraph (c) (ii)(iii) and (iv);
- (e) in the case of sovereigns that are not eligible for a risk-weight of zero, domestic sovereign or central bank debt Securities issued in foreign currencies, up to the amount of the Authorised Person's stressed net cash outflows in that specific foreign currency stemming from the Authorised Person's operations in the jurisdiction where the Authorised Person's Liquidity Risk is being taken, where those Securities satisfy all of the conditions in paragraph (c) (ii)(iii) and (iv); and
- (f) any other types of assets approved by the Regulator under Rule A10.2.9 as being eligible to be Level 1 HQLA.

#### **Level 2A HQLA**

- A10.2.7** (1) Level 2A HQLA must be valued at market value and subject to a 15% haircut.
- (2) Level 2A HQLA consists of:
- (a) marketable Securities representing claims on or guaranteed by sovereigns, central banks, PSEs or MDBs that satisfy all of the following conditions:
    - (i) they are assigned a 20% or lower risk-weight according to Chapter 4 and App4 of this Rulebook;
    - (ii) they are traded in large, deep and active repo or cash markets characterised by a low level of concentration;
    - (iii) they have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions (i.e. maximum decline of price or increase in

haircut over a 30-day period during a relevant period of significant liquidity stress not exceeding 10%); and

- (iv) they are not an obligation of a Financial Institution or any of its associated entities;
- (b) corporate debt Securities (including commercial paper) and covered bonds that satisfy all of the following conditions:
  - (i) in the case of corporate debt Securities: they must not be issued by a Financial Institution or any of its associated entities and must include only plain vanilla assets (i.e. not include complex Structured Products or subordinated debt) whose valuation is readily available based on standard methods and does not depend on private knowledge;
  - (ii) in the case of covered bonds: they must not be issued by the Authorised Person itself or any of its associated entities;
  - (iii) the assets must have a Credit Quality Grade of 1, or if the assets do not have a credit assessment by a recognised ECAI, they must be internally rated as having a probability of default (PD) corresponding to a Credit Quality Grade of 1;
  - (iv) they must be traded in large, deep and active repo or cash markets characterised by a low level of concentration; and
  - (v) they must have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions (i.e. maximum decline of price or increase in haircut over a 30-day period during a relevant period of significant liquidity stress not exceeding 10%); and
- (c) any other types of assets approved by the Regulator under Rule A10.2.9 as being eligible to be Level 2A HQLA.

#### **Level 2B HQLA**

- A10.2.8** (1) Level 2B HQLA must be valued at market value and subject to an appropriate haircut, as specified in (2), for each type of asset.
- (2) Level 2B HQLA consists of:
- (a) residential mortgage-backed Securities that satisfy all of the following conditions, subject to a 25% haircut:
    - (i) they are not issued by, and the underlying assets have not been originated by, the Authorised Person itself or any of its affiliated entities;
    - (ii) they have a Credit Quality Grade of 1;
    - (iii) they are traded in large, deep and active repo or cash markets characterised by a low level of concentration;

- (iv) they have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions, (i.e. maximum decline of price or increase in haircut over a 30-day period during a relevant period of significant liquidity stress not exceeding 20%);
  - (v) the underlying asset pool is restricted to residential mortgages and does not contain Structured Products;
  - (vi) the underlying mortgages are "full recourse" loans (i.e. in the case of foreclosure the mortgage owner remains liable for any shortfall in sales proceeds from the property) and have a maximum loan-to-value ratio (LTV) of 80% on average at issuance; and
  - (vii) the securitisations are subject to "risk retention" regulations which require Issuers to retain an interest in the assets they securitise;
- (b) corporate debt Securities (including commercial paper) that satisfy all of the following conditions, subject to a 50% haircut:
  - (i) they are not issued by a Financial Institution or any of its affiliated entities;
  - (ii) they have a Credit Quality Grade of 2 or 3 or, in the case the assets do not have a credit assessment by a recognised ECAI, are internally rated as having a probability of default (PD) corresponding to a Credit Quality Grade of 2 or 3;
  - (iii) they are traded in large, deep and active repo or cash markets characterised by a low level of concentration; and
  - (iv) they have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions, (i.e. maximum decline of price or increase in haircut over a 30-day period during a relevant period of significant liquidity stress not exceeding 20%);
- (c) equity Shares that satisfy all of the following conditions, subject to a 50% haircut:
  - (i) they are not issued by a Financial Institution or any of its affiliated entities;
  - (ii) they are exchange-traded and centrally cleared;
  - (iii) they are a constituent of the major stock index in the home jurisdiction, or where the Liquidity Risk is taken, as decided by the supervisor in the jurisdiction where the index is located;
  - (iv) they are denominated in the domestic currency of an Authorised Person's home jurisdiction or in the currency of



the jurisdiction where an Authorised Person's Liquidity Risk is taken;

- (v) they are traded in large, deep and active repo or cash markets characterised by a low level of concentration; and
  - (vi) they have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions, (i.e. maximum decline of price or increase in haircut over a 30-day period during a relevant period of significant liquidity stress not exceeding 40%); and
- (d) any other types of assets approved by the Regulator under Rule A10.2.9 as being eligible to be Level 2B HQLA.

### **Approval of other types of HQLA**

- A10.2.9** (1) The Regulator may approve other types of assets (in addition to those specified in Rules A10.2.6 to A10.2.8) as being eligible to be included in the stock of HQLA for the purposes of the calculation of the LCR.
- (2) If the Regulator approves assets under (1), it must specify whether they are to be classified as Level 1 HQLA or Level 2 HQLA and the haircut, if any, to be applied to them.

### **Guidance**

The Regulator may use its discretion under Rule A10.2.9 to approve other types of assets as HQLA including, but not limited to, Shari'a compliant Financial Products. When the Regulator approves assets it may define the conditions that the assets must satisfy to be treated as HQLA. It must specify whether the assets are to be treated as Level 1 HQLA or Level 2A or 2B HQLA.

### **Other provisions relating to LCR calculation**

- A10.2.10** For the purpose of calculating the LCR, if an eligible asset within HQLA becomes ineligible (e.g. due to a rating downgrade), an Authorised Person is allowed to keep the asset in its stock of HQLA for an additional 30 calendar days to allow time to adjust its stock as needed or replace the asset.
- A10.2.11** For the purpose of calculating a consolidated LCR for a Financial Group, where applicable, qualifying HQLA held to meet statutory liquidity requirements at a legal entity or sub-consolidated level may be included in the stock at the consolidated level only to the extent that the related risks are also reflected in the consolidated LCR. Any surplus of HQLA held at the legal entity can be included in the consolidated stock of HQLA only if those assets would also be freely available to the consolidated Parent entity in times of stress.
- A10.2.12** An Authorised Person must be able to meet its liquidity needs in each currency in which it has a significant Exposure. The currencies of the stock of HQLA of an Authorised Person must be similar in composition to its liquidity needs by currency.

### Total Net Cash Outflow

**A10.2.13** (1) An Authorised Person must calculate its Total Net Cash Outflow over the following 30 calendar days in accordance with the following formula:

**Total Net Cash Outflows over the next 30 calendar days**

=

**Total expected cash outflows**

-

**Min (total expected cash inflows, 75% of total expected cash outflows)**

- (2) Total expected cash outflows are calculated by multiplying the outstanding balances of various categories or types of liabilities and off-balance sheet commitments by the rates at which they are expected to run off or be drawn down.
- (3) Total expected cash inflows are calculated by multiplying the outstanding balances of various categories of contractual receivables by the rates at which they are expected to flow in.
- (4) To ensure a minimum level of HQLA holdings at all times, total cash inflows are subject to an aggregate cap of 75% of total expected cash outflows.

**A10.2.14** An Authorised Person must not double-count items. That is, for assets included as part of the eligible stock of HQLA, the associated cash inflows arising from such assets must not be counted as cash inflows for the purpose of calculating the net cash outflows over the next 30 calendar days.

### Cash Outflows

**A10.2.15** The following table specifies, for each of the various categories or types of liabilities and off-balance sheet commitments, the rates at which they are expected to run off or be drawn down for the purpose of calculating the LCR.

Cash Outflows	
Item	Factor
<b>A. Retail Deposits:</b>	
Demand Deposit and term Deposits (less than 30 days maturity)	
• Stable Deposits	5%
• Less stable retail Deposits	10%
Term Deposits with residual maturity greater than 30 days	0%
<b>B. Unsecured Wholesale Funding:</b>	

Cash Outflows	
Item	Factor
Small business customers - demand and term Deposits with less than 30 days maturity provided by:	
• Stable Deposits	5%
• Less stable Deposits	10%
Small business customers - term Deposits with residual maturity greater than 30 days with no legal right to withdraw or a withdrawal with a significant penalty	0%
Operational Deposits generated by clearing, custody and cash management activities:	25%
• Portion covered by Deposit insurance	5%
Cooperative banks in an institutional network (qualifying Deposits with the centralised institution)	25%
Non-financial corporates, sovereigns, central banks, multilateral development banks and PSEs	40%
• If the entire amount is fully covered by a Deposit protection scheme	20%
Other legal entity customers	100%
<b>C. Secured Funding:</b>	
• Secured funding transactions with a central bank Counterparty or backed by Level 1 HQLA with any Counterparty	0%
• Secured funding transactions backed by Level 2A HQLA, with any Counterparty	15%
• Secured funding transactions backed by non-Level 1 HQLA or non- Level 2A HQLA, with domestic sovereigns, multilateral development banks, or domestic PSEs as a Counterparty	25%
• Backed by RMBS eligible for inclusion in Level 2B HQLA	25%
• Backed by other Level 2B HQLA	50%
• All other secured funding transactions	100%
<b>D. Additional Requirements:</b>	
Derivatives cash outflows	100%
Liquidity needs (e.g. Collateral calls) related to financing transactions, Derivatives and other contracts	100%
Market valuation changes on non-Level 1 HQLA posted Collateral securing Derivatives	20%
Excess Collateral held by a bank related to Derivative transactions that could contractually be called at any time by its Counterparty	100%

Cash Outflows	
Item	Factor
Liquidity needs related to Collateral contractually due from the reporting bank on Derivatives transactions	100%
Increased liquidity needs related to Derivative transactions that allow Collateral substitution to non-HQLA assets	100%
Market valuation changes on Derivatives transactions (largest absolute net 30-day Collateral flows realised during the preceding 24 months)	100%
ABCP, SIVs, Conduits, etc:	
<ul style="list-style-type: none"> <li>Loss of funding on Asset Backed Securities, covered bonds and other structured financing instruments</li> </ul>	100%
<ul style="list-style-type: none"> <li>Loss of funding on ABCP, SIVs, SPVs, etc</li> </ul>	100%
Undrawn committed credit and liquidity facilities:	
<ul style="list-style-type: none"> <li>Retail and small and medium-sized enterprise clients</li> </ul>	5%
<ul style="list-style-type: none"> <li>Non-financial corporates, sovereigns and central banks, PSEs, MDBs</li> </ul>	10% for credit 30% for liquidity
<ul style="list-style-type: none"> <li>Banks subject to prudential supervision</li> </ul>	40%
<ul style="list-style-type: none"> <li>Other Financial Institutions (include Securities firms, insurance companies, fiduciaries and beneficiaries)</li> </ul>	40% for credit 100% for liquidity
<ul style="list-style-type: none"> <li>Other legal entity customers</li> </ul>	100%
<ul style="list-style-type: none"> <li>Other contractual obligations to Financial Institutions</li> </ul>	100%
<ul style="list-style-type: none"> <li>Other contractual obligations to retail and non-financial corporate clients</li> </ul>	100%
Other contingent funding obligations:	
<ul style="list-style-type: none"> <li>Non-contractual obligations related to potential liquidity draws from joint ventures or minority Investments in entities</li> </ul>	100%
<ul style="list-style-type: none"> <li>Trade finance-related obligations (including letters of credit and guarantees)</li> </ul>	3%
<ul style="list-style-type: none"> <li>Non contractual obligations where customer short positions are covered by other customers' Collateral</li> </ul>	50%
<ul style="list-style-type: none"> <li>Unconditionally revocable "uncommitted" credit and liquidity facilities</li> </ul>	5%
<ul style="list-style-type: none"> <li>Guarantees and letters of credit unrelated to trade finance obligations</li> </ul>	10%
<ul style="list-style-type: none"> <li>Non-contractual obligations:</li> </ul>	
<ul style="list-style-type: none"> <li>Debt-buy back requests (incl. related conduits)</li> </ul>	100%

Cash Outflows	
Item	Factor
<ul style="list-style-type: none"> <li>Structured products</li> </ul>	10%
<ul style="list-style-type: none"> <li>Managed funds</li> </ul>	10%
<ul style="list-style-type: none"> <li>Other non-contractual obligations</li> </ul>	100%
Outstanding debt Securities (unsecured and secured, term as well as short-term) with remaining maturity > 30 days of issuers with an affiliated dealer or market-maker	100%
Other contractual cash outflows	100%

### Guidance

- The following Guidance sets out the Regulator's views about how the Table in Rule A10.2.15 should be applied to different items.

### Retail Deposits:

- Retail Deposits should include Deposits from individuals placed with an Authorised Person. Deposits from legal entities, sole proprietorships or Partnerships should be included in wholesale Deposit categories. Deposits may include demand Deposits and term Deposits, unless otherwise excluded.
- Deposits from individuals are divided under the Table into 'stable' and 'less stable' Deposits. Stable Deposits should include the portion of Deposits that are fully covered by an effective Deposit insurance scheme or by a public guarantee that provides equivalent protection and where:
  - the depositor has other established relationships with the Authorised Person that make Deposit withdrawal highly unlikely; or
  - the Deposits are in transactional accounts (e.g. accounts where salaries are automatically credited).
- If an Authorised Person is not able to readily identify which retail Deposits would qualify as "stable" according to paragraph 4, it should place the full amount in the "less stable" buckets.
- Less stable Deposits should consist of the portion of Deposits that do not meet the conditions in paragraph 4 and also include types of Deposits more likely to be withdrawn in a time of stress. These should include high-value Deposits (i.e. Deposits above any Deposit insurance limit), Deposits from customers who do not have established relationships with an Authorised Person that make the Deposit withdrawal unlikely, Deposits from sophisticated or high net worth individuals, Deposits where the internet is integral to the design, marketing and use of the account (on-line accounts) and Deposits with promotional interest rates (i.e. that are heavily rate-driven).

6. Cash outflows related to retail term Deposits with a residual maturity or withdrawal notice period of greater than 30 days should be excluded from total expected cash outflows only if the depositor has no legal right to withdraw Deposits within the 30-day period of the LCR, or if early withdrawal results in a significant penalty that is materially greater than the loss of interest. If an Authorised Person allows a depositor to withdraw such Deposits despite a clause that says the depositor has no legal right to withdraw, the entire category of these funds should be treated as demand Deposits.

#### **Unsecured wholesale funding:**

7. Unsecured wholesale funding should consist of liabilities and general obligations raised from non-natural Persons (i.e. legal entities, including sole proprietorships and Partnerships) and not collateralised by legal rights to specifically designated assets owned by the Authorised Person accepting the Deposit in the case of bankruptcy, insolvency, liquidation or resolution. Obligations related to Derivative contracts should be excluded from this category.
8. The wholesale funding included in the LCR should consist of all funding that is callable within the LCR's period of 30 days or that has its earliest possible contractual maturity date within this period (such as maturing term Deposits and unsecured debt Securities), as well as funding with an undetermined maturity. This should include all funding with Options that are exercisable at the investor's discretion within the 30-day period.
9. Wholesale funding that is callable by the funds provider subject to a contractually defined and binding notice period longer than the 30-day period should not be included.
10. Unsecured wholesale funding provided by small and medium-sized enterprise customers should be treated as Deposits from individuals where:
  - a. the Deposits and other extensions of funds made by non-financial small and medium-sized enterprise customers are managed as retail accounts and are generally considered as having similar Liquidity Risk characteristics to retail accounts; and
  - b. the total aggregated funding raised from a small and medium-sized enterprise customer is less than \$1 million (on a consolidated basis where applicable).

#### **Operational Deposits**

11. Operational Deposits should consist of those Deposits where customers place, or leave, Deposits with an Authorised Person to facilitate their access and ability to use payment and settlement systems and otherwise make payments. Balances can be included only if the customer has a substantive dependency on the Authorised Person and the Deposit is required for such activities.
12. Qualifying activities in this context refer to clearing, custody or cash management activities where the customer is reliant on the Authorised

Person to perform these services as an independent third-party intermediary in order to fulfil its normal banking activities over the next 30 days. These services should be provided to institutional customers under a legally binding agreement and the termination of such agreements should be subject either to a notice period of at least 30 days or to significant switching costs to be borne by the customer if the operational Deposits are moved before 30 days.

13. Qualifying operational Deposits generated by such an activity should consist of Deposits which are:
  - a. by-products of the underlying services provided by the Authorised Person;
  - b. not offered by the Authorised Person in the wholesale market in the sole interest of offering interest income; and
  - c. held in specifically designated accounts and priced without giving an economic incentive to the customer to leave excess funds on these accounts.
14. Any excess balances that could be withdrawn without jeopardising these clearing, custody or cash management activities should not qualify as operational Deposits.

#### **Liquidity facilities**

15. A liquidity facility should consist of any committed, undrawn back-up facility that would be used to refinance the debt obligations of a customer in situations where such a customer is unable to roll over that debt in financial markets. The amount of any commitment to be treated as a liquidity facility should consist of the amount of the outstanding debt issued by the customer (or proportionate share of a syndicated facility) maturing within a 30-day period that is backstopped by the facility. Any additional capacity of the facility should be treated as a committed Credit Facility. General working capital facilities for corporate entities (e.g. revolving credit facilities in place for general corporate or working capital purposes) should not be classified as liquidity facilities, but as credit facilities.
16. Despite paragraph 15, any facilities provided to hedge funds, Money market funds and special purpose funding vehicles, or other vehicles used to finance an Authorised Person's own assets, should be captured in their entirety as a liquidity facility to a Financial Institution.

#### **Unrestricted PSIA's and other Shari'a compliant products**

17. For the purposes of calculating cash outflows, Unrestricted PSIA's should be treated similarly to the relevant category of Deposits specified in the Table. The appropriate run-off factor for a PSIA will depend on the contractual withdrawal rights of the investment account holders and whether it is a retail or wholesale account.
18. For commodity Murabaha transactions, a run-off factor of 100% should be applied to the balance of the Murabaha payable, if the remaining term of the contract does not exceed 30 days. If early withdrawal of the original amount



is allowed at the discretion of the Authorised Person with no mark-up, then the applicable run-off factor will be the same as that for the relevant category of Deposit or Unrestricted PSIA under the Table.

### Outstanding debt securities

19. Issuers with an affiliated dealer or market-maker must include outstanding debt securities (unsecured and secured, term as well as short-term) with remaining maturities greater than thirty days in order to cover the potential repurchase of such outstanding securities.

### Cash Inflows

- A10.2.16** (1) When considering its available cash inflows, an Authorised Person may include contractual inflows from outstanding Exposures only if they are fully performing and there is no reasonable basis to expect a default within the 30-day period. Contingent inflows are not included in total net cash inflows.
- (2) Where an Authorised Person is overly reliant on cash inflows from one or a limited number of wholesale Counterparties, the Regulator may set an alternative limit on the level of cash inflows that can be included in the LCR.
- A10.2.17** (1) The Regulator may allow an Authorised Person to recognise as cash inflow, access to a Parent entity's funds via a committed funding facility if the Authorised Person is a Subsidiary of a foreign bank. In such instances, the committed funding facility from the Parent entity must meet both of the following criteria:
- (a) the facility must be an irrevocable commitment and must be appropriately documented; and
  - (b) the facility must be quantified.
- (2) A committed funding facility from a Parent entity referred to in (1) can be recognised as a cash inflow only from day 16 of the LCR scenario. The cash inflow from a Parent entity can be sufficient in size to cover only net cash outflows against items with a maturity or next call date between days 16 and 30 of the LCR.
- A10.2.18** The following table specifies, for each of the various categories and types of contractual receivables, the rates at which they are expected to flow in for the purpose of the calculation of the LCR.

Cash Inflows	
Item	Factor
<b>Maturing secured lending (including reverse repos and Securities borrowing), backed by the following as Collateral:</b> <ul style="list-style-type: none"> <li>Level 1 HQLA</li> <li>Level 2A HQLA</li> <li>Level 2B HQLA <ul style="list-style-type: none"> <li>Eligible RMBS</li> <li>Other assets</li> </ul> </li> <li>Margin lending backed by all other Collateral</li> <li>All other assets</li> <li>Credit or liquidity facilities provided to the reporting Bank</li> <li>Operational Deposits held at other Financial Institutions (including Deposits held at centralised institution of network of co-operative banks)</li> </ul>	0% 15%  25% 50% 50% 100% 0% 0%
<b>Other inflows by Counterparty:</b> <ul style="list-style-type: none"> <li>Amounts receivable from retail Counterparties</li> <li>Amounts receivable from non-financial wholesale Counterparties, from transactions other than those listed in the above inflow categories</li> <li>Amounts receivable from Financial Institutions and central banks, from transactions other than those listed in the above inflow categories</li> <li>Net Derivative receivables</li> <li>Other contractual cash inflows</li> </ul>	50% 50% 100% 100% 100%

## Guidance

### Maturing secured lending, including reverse repos and Securities borrowing

- An Authorised Person should assume that maturing reverse repurchase or Securities borrowing agreements secured by Level 1 HQLA will be rolled over and will not give rise to any cash inflows (zero %). Maturing reverse repurchase or Securities borrowing agreements secured by Level 2 HQLA should be modelled as cash inflows, equivalent to the relevant haircut for the specific assets. An Authorised Person is assumed not to roll-over maturing reverse repurchase or Securities borrowing agreements secured by non-HQLA assets and can assume it will receive 100% of the cash related to those agreements. Collateralised loans extended to customers for the purpose of taking leveraged trading positions, i.e. margin loans, should be modelled with a 50% cash inflow from contractual inflows made against non-HQLA Collateral.

2. An exception to paragraph 1 is the situation where, if the Collateral obtained through reverse repo, Securities borrowing or Collateral swaps, which matures within the 30-day period, is re-used (i.e. rehypothecated) and is tied up for 30 days or longer to cover short positions. An Authorised Person should then assume that such reverse repo or Securities borrowing arrangements will be rolled over and will not give rise to any cash inflows (zero %), reflecting its need to continue to cover the short position or to repurchase the relevant Securities.
3. An Authorised Person should manage its Collateral so that it is able to fulfil obligations to return Collateral whenever the Counterparty decides not to roll-over any reverse repo or Securities lending transaction. This is especially the case for non-HQLA Collateral, since such outflows are not captured in the LCR framework.

**Lines of credit**

4. Lines of credit, liquidity facilities and other contingent funding facilities that an Authorised Person holds at other institutions for its own purposes should be assumed to be able to be drawn and so such facilities should receive a zero % inflow rate.

**Inflows by Counterparty**

5. All inflows should be taken only at the latest possible date, based on the contractual rights available to Counterparties. Inflows from loans that have no specific maturity should not be included, with the exception of minimum payments of principal, fee or interest associated with an open maturity loan.
6. Operational Deposits: a zero % inflow rate should apply to Deposits held at other Financial Institutions for operational purposes.

**Other cash inflows**

7. Other contractual cash inflows: other contractual cash inflows should be included under this category. Cash inflows related to non-financial revenues should not be taken into account in the calculation of the net cash outflows for the purposes of the LCR. These items should receive an inflow rate of 100%.

**A10.3 The Liquidity Mismatch Approach****Including inflows (assets) and outflows (liabilities) in the timebands**

- A10.3.1** (1) Outflows (liabilities) must be included in the sight-eight day time band according to their earliest contractual maturity.
- (2) Contingent liabilities may be excluded from the sight-eight day time band only if there is a likelihood that the conditions necessary to trigger them will not be fulfilled.
- (3) Inflows (assets) must be included in the sight-eight day time band according to their latest contractual maturity, except that the following assets must be included regardless of their contractual maturity:
- (a) undrawn committed standby facilities provided by other banks; and
  - (b) marketable assets, at a discount.
- (4) Assets which have been pledged as Collateral must be excluded from the sight-eight day time band.

**Including marketable assets in the Maturity Ladder**

- A10.3.2** (1) Assets which are readily marketable are included in the Maturity Ladder in the sight-eight 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 Regulator may allow, on a case by case basis, an Authorised Person to include a longer term asset which is relatively easy to liquidate in the sight-eight days time band.
- (4) The discount factor to be applied to types of marketable assets must be determined by reference to the following table and Rules A10.2.6 to A10.2.9:

Marketable Asset	Discount factor
Level 1 HQLA	0%
Level 2A HQLA	15%
Level 2B HQLA – eligible asset –backed securities	25%
Level 2B HQLA – other HQLA	50%
Non-HQLA eligible trading assets that are Investment Grade	60%

- (5) The Regulator may vary the discount factors to reflect the conditions of a particular market or institution.

#### **A10.4 The Net Stable Funding Ratio**

##### **Guidance**

- Neither the NSFR, nor the LCR, should be seen by an Authorised Person as providing a complete picture of its funding profile or the stability of the funding available to it. An Authorised Person should always conduct further assessments of its funding needs and sources of funding to complement the information obtained from the two measures.
- Terms used for the NSFR mirror those in use for the LCR, unless otherwise stated.

**A10.4.1** An Authorised Person must calculate its NSFR on an ongoing basis, using the total amount of Available Stable Funding calculated in accordance with Rule A10.4.8 and the total amount of Required Stable Funding calculated in accordance with Rule A10.4.9.

##### **Guidance**

- An Authorised Person should calculate its NSFR with appropriate frequency to ensure that it is able to monitor its satisfaction of the requirement in Rule 10.4.1 at all times and, additionally, where it believes that a change has happened to its Available Stable Funding or Required Stable Funding that might result in a material change to the level of its NSFR.
- For Available Stable Funding, i.e. on the funding side, the ASF factors have been calibrated to reflect the tenor of the funding with longer-term liabilities assumed to be more stable than short-term liabilities, and also the nature of the counterparty providing the funding.
- For Required Stable Funding, i.e. covering assets and off-balance sheet items, the RSF factors again reflect the tenor of the assets. The calibration of the factors assumes that short-dated assets should attract lower RSF factors as a proportion of them could be allowed to run to maturity instead of

requiring further funding in the event of their being rolled over, which may also be influenced by the desire to maintain customer relationships. Similarly, unencumbered, high-quality assets may be more easily securitised or traded to provide additional funding and this is recognised in lower RSF factors.

### **Available Stable Funding (ASF)**

**A10.4.2** Subject to Rule A10.4.6, an Authorised Person must identify its capital instruments that are to be included in its Available Stable Funding by considering the capital elements that are meet the requirements for eligibility under:

- (a) Rule 3.10.2;
- (b) Rule 3.11.2; and
- (c) Rule 3.12.2, excluding all Tier 2 capital instruments with residual maturity of less than one year.

**A10.4.3** Subject to Rule A10.4.6, an Authorised Person must include in the calculation of its Available Stable Funding the total amount of its other capital instruments that are not captured under A10.4.2 and that have a residual maturity of one year or more.

**A10.4.4** Where the value of a Derivative Contract represents a liability for an Authorised Person, the Authorised Person must:

- (a) calculate the negative value of the liability as the replacement cost for the contract, obtained by marking-to-market; and
- (b) deduct any collateral posted in the form of variation margin from the negative replacement cost amount.

**A10.4.5** An Authorised Person may use the net replacement cost as the replacement cost for a set of derivative exposures between the Authorised Person and a Counterparty where the following conditions are met:

- (a) an eligible bilateral netting contract must be in place between the Authorised Person and the Counterparty that is binding on the Authorised Person and the Counterparty and that is legally enforceable in all relevant jurisdictions;
- (b) that contract is a qualified financial contract as specified in the ADGM Insolvency Regulations and meets the conditions specified in Part 7, Chapter 2 therein; and
- (c) the Authorised Person meets the disclosure requirements for the NSFR as specified in App12.

**A10.4.6** In determining the residual maturity of an instrument captured under Rule A10.4.2 or Rule A10.4.3 or any other liability that is to be included in the Available Stable Funding, an Authorised Person must calculate the residual maturity of each instrument or liability as being that period up to the earliest point in time at which an investor has the right to exercise their right to redeem their investment or withdraw that source of funding.

**A10.4.7** For long-dated liabilities, the portion of cashflows falling at or beyond the six-month and one-year time horizons must be treated as having an effective residual maturity of six months or more and one year or more, respectively.

#### Guidance

1. When determining the maturity of a liability or a capital instrument, investors should be assumed to redeem a call option at the earliest possible date available to them. For funding with options exercisable at the discretion of an Authorised Person, the Regulator will take into account reputational factors that may limit the ability of the Authorised Person not to exercise the option.
2. In particular, where the market expects certain liabilities to be redeemed before their legal final maturity date, Authorised Persons and the Regulator should assume such behaviour for the purpose of calculating the NSFR and include these liabilities in the corresponding ASF category.

**A10.4.8** An Authorised Person must calculate its Available Stable Funding by:

- (a) assigning each capital instrument and liability to one of the categories in the following table;
- (b) multiplying the Carrying Value of each capital instrument and liability by the ASF factor associated with that category; and
- (c) summing those weighted values.

ASF factor	ASF category
100%	<ul style="list-style-type: none"> <li>• amounts from Rule A10.4.2</li> <li>• amounts from Rule A10.4.3</li> <li>• the total amount of secured and unsecured borrowings and liabilities (including term deposits) with effective residual maturities of one year or more, excluding all cashflows falling below the one-year horizon that are associated with such borrowings and liabilities</li> </ul>
95%	<ul style="list-style-type: none"> <li>• stable <ul style="list-style-type: none"> <li>○ demand Deposits; and</li> <li>○ term Deposits and PSIAus with residual maturities of less than one year from retail and small business customers</li> </ul> </li> </ul>
90%	<ul style="list-style-type: none"> <li>• less stable <ul style="list-style-type: none"> <li>○ demand Deposits; and</li> <li>○ term Deposits and PSIAus with residual maturities of less than one year from retail and small business customers</li> </ul> </li> </ul>
50%	<ul style="list-style-type: none"> <li>• funding (secured and unsecured) with a residual maturity of less than one year provided by non-financial corporate customers</li> <li>• operational deposits generated by clearing, custody and cash management activities</li> </ul>



ASF factor	ASF category
	<ul style="list-style-type: none"> <li>funding with residual maturity of less than one year from sovereigns, public sector entities (PSEs), and multilateral and national development banks</li> <li>other funding (secured and unsecured) not included in the categories above with residual maturity between six months to less than one year, including funding from central banks and financial institutions</li> </ul>
0%	<ul style="list-style-type: none"> <li>all other liabilities and equity categories not included in the above categories, including other funding with residual maturity of less than six months from central banks and financial institutions</li> <li>other liabilities without a stated maturity, and this category may include short positions and open maturity positions <ul style="list-style-type: none"> <li>Two exceptions may be recognised for liabilities without a stated maturity: <ul style="list-style-type: none"> <li>deferred tax liabilities, which should be treated according to the nearest possible date on which such liabilities could be realised; and</li> <li>minority interest, which should be treated according to the term of the instrument, usually in perpetuity</li> </ul> </li> <li>These liabilities would then be assigned either a 100% ASF factor if the effective maturity is one year or greater, or 50%, if the effective maturity is between six months and less than one year</li> </ul> </li> <li>NSFR derivative liabilities as calculated according to Rule A10.4.4 net of NSFR derivative assets as calculated according to Rule A10.4.11, if NSFR derivative liabilities are greater than NSFR derivative assets</li> <li>Net NSFR Shari'a compliant hedging liabilities (where NSFR Shari'a compliant hedging liabilities are greater than NSFR Shari'a compliant hedging assets)</li> <li>"trade date" payables arising from purchases of financial instruments, foreign currencies and commodities that: <ul style="list-style-type: none"> <li>are expected to settle within the standard settlement cycle or period that is customary for the relevant exchange or type of transaction; or</li> <li>have failed to, but are still expected to, settle</li> </ul> </li> </ul>

### Guidance

- Guidance on the characteristics of "stable", "less stable" and "operational" Deposits and PSIAus is given under A10.2.15.
- In order to calculate the value of Shari'a compliant hedging liabilities (e.g. Islamic swaps), the replacement cost must be obtained for the Shari'a compliant hedging contracts (obtained by marking to market), such as ISDA/IIFM Tahawwut Master Agreement (TMA), where the contract has a negative value. When an eligible bilateral netting contract is in place, the replacement cost for the set of Shari'a compliant hedging exposures covered by the contract will be the net replacement cost.
- In calculating the NSFR, collateral posted in the form of variation margin that follows Shari'a principles in connection with Shari'a compliant hedging contracts as in the TMA contract, regardless of the asset type, must be

deducted from the negative replacement cost amount of the corresponding Shari'a compliant hedging liabilities.

### **Required Stable Funding (RSF)**

**A10.4.9** Subject to Rules A10.4.15, an Authorised Person must calculate its Required Stable Funding as the sum of the Required Stable Funding for its assets and for its off-balance sheet items, calculated in accordance with Rules A10.4.16, A10.4.18 and A10.4.19.

**A10.4.10** In calculating the Required Stable Funding, an Authorised Person must, subject to (b) and (c):

- (a)
  - (i) include financial instruments, foreign currencies and commodities for which a purchase order has been executed; and
  - (ii) exclude financial instruments, foreign currencies and commodities for which a sales order has been executed.
- (b)
  - (i) The effects of such transactions must be reflected in the balance sheet of the Authorised Person when settled; and
  - (ii) such transactions must not be reflected as derivatives or secured financing transactions in the balance sheet of the Authorised Person.
- (c) This treatment is to be applied whether or not such transactions have been reflected in the balance sheet under a settlement-date accounting model.

**A10.4.11** Where the value of a Derivative Contract represents an asset for an Authorised Person, the Authorised Person must:

- (a) calculate the positive value of the asset as the replacement cost for the contract, obtained by marking-to-market; and
- (b) deduct any collateral received in the form of variation margin from the positive replacement cost amount.

**A10.4.12** An Authorised Person may use the net replacement cost as the replacement cost for a set of derivative exposures between the Authorised Person and a Counterparty where the following conditions are met:

- (a) an eligible bilateral netting contract must be in place between the Authorised Person and the Counterparty that is binding on the Authorised Person and the Counterparty and that is legally enforceable in all relevant jurisdictions;
- (b) that contract is a qualified financial contract as specified in the ADGM Insolvency Regulations and meets the conditions specified in Part 7, Chapter 2 therein; and
- (c) the Authorised Person meets the disclosure requirements for the NSFR as specified in App12.

**A10.4.13** Where an Authorised Person has entered into secured funding arrangements, the Authorised Person must:

- (a) include in its calculation of the RSF;
  - (i) securities it has lent in SFTs where it retains beneficial ownership; and
  - (ii) encumbered securities in repos or other securities financing transactions where it has retained beneficial ownership and those assets remain on its balance sheet; and
- (b) exclude from its calculation of the RSF;
  - (i) securities which it has borrowed in SFTs (such as reverse repos and collateral swaps) and to which it does not have beneficial ownership; and
  - (ii) any securities it has received through collateral swaps if those securities do not appear on its balance sheet.

**A10.4.14** An Authorised Person may measure SFTs with a single Counterparty net when calculating the NSFR where the following conditions are met:

- (a) an eligible bilateral netting contract must be in place between the Authorised Person and the Counterparty that is binding on the Authorised Person and the Counterparty and that is legally enforceable in all relevant jurisdictions;
- (b) that contract is a qualified financial contract as specified in the ADGM Insolvency Regulations and meets the conditions specified in Part 7, Chapter 2 therein; and
- (c) the Authorised Person meets the disclosure requirements for the NSFR as specified in App12.

**A10.4.15** In determining the residual maturity of both assets and off-balance sheet items that are to be included in the Required Stable Funding, an Authorised Person must calculate the residual maturity of each individual asset or off-balance sheet item as being that period up to the latest point in time to which investors have the right to extend the maturity of an asset or an off-balance sheet item.

### **Guidance**

1. When determining the residual maturity of assets and off-balance sheet items, investors should be assumed to exercise any option to extend maturity. For assets with options exercisable at the discretion of the Authorised Person, the Regulator will take into account reputational factors that may limit the ability of the Authorised Person not to exercise the option.
2. In particular, where the market expects certain assets to be extended in their maturity, Authorised Persons and the Regulator should assume such behaviour for the purpose of the NSFR and include these assets in the corresponding RSF category. For amortising loans, the portion that comes due within the one-year horizon may be considered as having a residual maturity of less than one year and included in the appropriate RSF category.

**A10.4.16** Subject to A10.4.17, an Authorised Person must calculate the Required Stable Funding that it needs for its assets by:

- (a) assigning each asset to one of the RSF asset categories in the following table;
- (b) multiplying the Carrying Value of each asset by the RSF factor associated with that asset category; and
- (c) summing those weighted values.

RSF factor	RSF asset category
0%	<ul style="list-style-type: none"> <li>coins and banknotes immediately available to meet obligations</li> <li>all central bank reserves (including required reserves and excess reserves)</li> <li>all claims on central banks with residual maturities of less than six months</li> <li>“trade date” receivables arising from sales of financial instruments, foreign currencies and commodities that: <ul style="list-style-type: none"> <li>are expected to settle within the standard settlement cycle or period that is customary for the relevant exchange or type of transaction; or</li> <li>have failed to, but are still expected to, settle</li> </ul> </li> </ul>
5%	<ul style="list-style-type: none"> <li>unencumbered Level 1 HQLA as defined in Rule A10.2.6(2), excluding those assets receiving an RSF factor of 0% as above</li> </ul>
10%	<ul style="list-style-type: none"> <li>unencumbered loans to financial institutions with residual maturities of less than six months, where the loan is secured against Level 1 HQLA as defined in Rule A10.2.7(2), and where the bank has the ability to freely re-hypothecate the received collateral for the life of the loan</li> </ul>
15%	<ul style="list-style-type: none"> <li>unencumbered Level 2A assets as defined in Rule A10.2.8(2)</li> <li>all other unencumbered loans to financial institutions with residual maturities of less than six months not receiving an RSF factor of 10%</li> </ul>
50%	<ul style="list-style-type: none"> <li>unencumbered Level 2B assets as defined and subject to the conditions set forth in Rule A10.2.8</li> <li>any HQLA as defined in Rule A10.2.6, Rule 10.2.7 or Rule 10.2.8 that are encumbered for a period of between six months and less than one year</li> <li>all loans to financial institutions and central banks with residual maturity of between six months and less than one year</li> <li>operational deposits held at other financial institutions for operational purposes that are subject to the 50% ASF factor</li> <li>all other non-HQLA not included in the above categories that have a residual maturity of less than one year, including loans to non-financial corporate clients, loans to retail customers (i.e. natural persons) and small business customers, and loans to sovereigns and PSEs</li> </ul>
65%	<ul style="list-style-type: none"> <li>unencumbered residential mortgages with a residual maturity of one year or more that would qualify for a 50% or lower risk weight under Rule 4.12.17</li> <li>other unencumbered loans not included in the above categories, excluding loans to financial institutions, with a residual maturity of one year or more that would qualify for a 50% or lower risk weight under Section 4.12</li> </ul>
85%	<ul style="list-style-type: none"> <li>cash, securities or other assets posted as initial margin for Derivative Contracts or Shari’a compliant hedging contracts and cash or other assets</li> </ul>

RSF factor	RSF asset category
	<p>provided to contribute to the default fund of a central counterparty (CCP). Where securities or other assets posted as initial margin for Derivative Contracts would otherwise receive a higher RSF factor, they must retain that higher factor</p> <ul style="list-style-type: none"> <li>other unencumbered performing loans<sup>19</sup> that do not qualify for a 50% or lower risk weight under Section 4.12 and have residual maturities of one year or more, excluding loans to financial institutions</li> <li>unencumbered securities with a remaining maturity of one year or more and exchange-traded equities, that are not in default and do not qualify as HQLA according to the LCR</li> <li>physical traded commodities, including gold</li> </ul>
100%	<ul style="list-style-type: none"> <li>all assets on the balance sheet that are encumbered for a period of one year or more</li> <li>NSFR derivative assets as calculated according to A10.4.11, net of NSFR derivative liabilities as calculated according to A10.4.4, if NSFR derivative assets are greater than NSFR derivative liabilities</li> <li>NSFR Shari'a compliant hedging assets net of NSFR Shari'a compliant hedging liabilities (where NSFR Shari'a compliant hedging assets are greater than NSFR Shari'a compliant hedging liabilities)</li> <li>all other assets not included in the above categories, including non-performing loans, loans to financial institutions with a residual maturity of one year or more, non-exchange-traded equities, fixed assets, items deducted from regulatory capital, retained interest, insurance assets, subsidiary interests and defaulted securities</li> <li>20% of derivative liabilities (i.e. negative replacement cost amounts) as calculated according to A10.4.4(a) (before deducting variation margin posted)</li> <li>20% of Shari'a compliant hedging liabilities</li> </ul>

### Guidance

Guidance on the characteristics of “operational” Deposits is given under Rule A10.2.15.

**A10.4.17** For encumbered assets not captured in the table in Rule A10.4.16, an Authorised Person must assign an RSF factor for Required Stable Funding in accordance with the following.

- Assets encumbered for a period of between six months and less than one year that would, if unencumbered, receive an RSF factor lower than or equal to 50% must receive an RSF factor of 50%.
- Assets encumbered for between six months and less than one year that would, if unencumbered, receive an RSF factor higher than 50% retain that higher RSF factor.

- (c) Where assets have less than six months remaining in the encumbrance period, those assets may receive the same RSF factor as an equivalent asset that is unencumbered.
- (d) For the purposes of calculating the NSFR, assets that are encumbered for exceptional central bank liquidity operations must receive the RSF factor that they would if they were unencumbered.

**A10.4.18** An Authorised Person must calculate the Required Stable Funding that it needs for the assets to which Rule A10.4.17 applies by:

- (a) multiplying the Carrying Value of each of those assets by the RSF factor identified in Rule A10.4.17; and
- (b) summing those weighted values.

**A10.4.19** An Authorised Person must calculate the Required Stable Funding that it needs for its off-balance sheet items, including potential liquidity exposures, by:

- (a) assigning each off-balance sheet items to one of the RSF off-balance categories in the following table;
- (b) multiplying the value of each of those items by the RSF factor associated with that off-balance sheet category; and
- (c) summing those weighted values.

RSF factor		RSF off-balance sheet category
5% of the currently undrawn portion		<ul style="list-style-type: none"> <li>Irrevocable and conditionally revocable credit and liquidity facilities to any client</li> </ul>
National discretion		<ul style="list-style-type: none"> <li>Other contingent funding obligations, including products and instruments such as:</li> </ul>
	5%	<ul style="list-style-type: none"> <li>unconditionally revocable credit and liquidity facilities</li> </ul>
	3%	<ul style="list-style-type: none"> <li>trade finance-related obligations (including guarantees and letters of credit)</li> </ul>
	10%	<ul style="list-style-type: none"> <li>guarantees and letters of credit unrelated to trade finance obligations</li> </ul>
	100%	<ul style="list-style-type: none"> <li>non-contractual obligations such as: <ul style="list-style-type: none"> <li>potential requests for debt repurchases of the bank's own debt or that of related conduits, securities investment vehicles and other such financing facilities</li> <li>structured products where customers anticipate ready marketability, such as adjustable rate notes and variable rate demand notes (VRDNs)</li> <li>managed funds that are marketed with the objective of maintaining a stable value</li> </ul> </li> </ul>



**APP11 SUPERVISORY REVIEW AND EVALUATION PROCESS****A11.1 IRAP****Guidance****Application**

1. This Guidance is relevant to an Authorised Person described in Section 10.3 (that is, a firm in Category 1, 2, 3A, 3B, 3C, or 5) in regard to an Internal Risk Assessment Process (referred to in this Guidance as an IRAP).
2. The following Guidance generally assumes that the Rules relating to capital adequacy in these Rules apply to an Authorised Person on a solo basis. However, the Guidance is to be read as also applying where the capital adequacy requirements in these Rules apply to the Financial Group of an Authorised Person on a consolidated basis.

**Purpose of the IRAP**

3. The IRAP is an internal process of an Authorised Person which enables it to identify, assess, aggregate and monitor its risks adequately. The objective of the IRAP is to develop a comprehensive and detailed risk profile for the firm. The IRAP should help the firm ensure that sound risk management systems are in place, address any weaknesses in its risk management framework, and maintain adequate internal capital and liquid financial resources relative to its risk profile and to meet its liquidity risk management needs.
4. An Authorised Person should ensure that the IRAP forms an integral part of the firm's risk management framework and decision-making processes. The IRAP should cover all activities of the Authorised Person and should be proportionate to the nature and complexity of the firm's activities.
5. The Authorised Person should be able to demonstrate to the Regulator that its internal risk assessment is comprehensive and adequate relative to the nature of risks posed by its business activities and its operating environment.
6. The Regulator does not prescribe any specific approach for the IRAP and, consequently, an Authorised Person can choose to implement an IRAP which is proportionate to the nature, size and complexity of the business activities.
7. The IRAP should be subject to adequate internal controls and reviews by internal audit to ensure the integrity and objectivity of the process. The IRAP should consider the quality and effectiveness of the Authorised Person's risk management framework while determining its risk profile.
8. The IRAP should:
  - a. identify and outline all related parties of the Authorised Person, and list the types of transactions that occur between those related parties and the firm;



- b. identify the most significant risks to which the firm is exposed, which should, at a minimum, include the risks identified in Guidance note 9;
  - c. identify each of the firm's major business lines and prepare a comprehensive list of the major risks to which each of the businesses are exposed;
  - d. identify the controls and risk management measures used to address the risks referred to in b. and c. and assess the strength of such controls and systems; and
  - e. consider the impact of an economic or industry downturn on its future earnings, taking into account its business plans.
9. The IRAP should, in addition to the aforementioned factors:
- a. estimate, with the aid of historical data, where available, the range and distribution of possible losses which might arise from each of those risks and consider using stress tests to provide risk estimates;
  - b. consider the extent to which the firm's Capital Requirement adequately addresses the type of risks referred to under Guidance note 8.b. and c.; and
  - c. estimate the expected change in the firm's risk profile on the basis of projections of the firm's business activities for the next three to five years and be informed by the business plan of the Authorised Person, as required by GEN 3.3.16.
10. If the firm's IRAP is based on this Guidance, it may enable the Regulator more easily to review the IRAP as part of its SREP. However, the Regulator may decide to rely on an IRAP that is not consistent with the elements of this Guidance, owing to specific reasons and/or circumstances which necessitate an alternative approach.

#### **Guidance on risks to be covered as part of the IRAP**

11. An Authorised Person should consider the following risks, where relevant, in its IRAP:
- a. Credit Risk, including Large Exposures and concentration risks;
  - b. Market Risk;
  - c. Liquidity Risk;
  - d. for Islamic Financial Business involving PSiAs, displaced commercial risk;
  - e. interest rate risk in the Non-Trading Book;
  - f. Operational Risk;
  - g. internal controls and systems; and

h. reputational risk.

12. This Guidance is merely an indicative list of risk categories, which does not preclude an Authorised Person from assessing other risks that it considers significant (for example, securitisation risks and residual risks). Likewise, certain categories of risks might not be relevant to all Authorised Persons completing the IRAP. In this case, the IRAP should clearly indicate why the risk is considered minimal or not relevant. The IRAP should also consider all risks arising from any non-regulated activities of the Authorised Person, if they are seen as material to the risk profile of the firm.

## **A11.2 ICAAP**

### **Guidance**

#### **Application**

1. This Guidance is relevant to an Authorised Person as described in Section 10.4 (that is, a firm in Category 1, 2, 3A or 5) in regard to an Internal Risk Capital Adequacy Assessment Process (referred to in this Guidance as an ICAAP).

#### **Purpose and process of the ICAAP**

2. The ICAAP is an internal process of an Authorised Person which enables it to determine and maintain the amount and quality of capital that is adequate in relation to the Authorised Person's risk profile as assessed in the IRAP. Authorised Persons are encouraged to maintain capital over and above the regulatory minimum capital. The ICAAP, in conjunction with the IRAP, should be embedded in the Authorised Person's business and organisational processes and be informed by the business plan of the Authorised Person, as required by GEN 3.3.16.
3. When assessing its capital needs, an Authorised Person should take into account the impact of economic cycles, and sensitivity to other external risks and factors. For larger or more complex institutions, this may mean developing an appropriate stress testing and scenario testing framework.
4. The Regulator does not prescribe any specific approach for the ICAAP and, consequently, an Authorised Person can choose to implement an ICAAP which is proportionate to the nature, size and complexity of the business activities.
5. In completing an ICAAP, an Authorised Person should:
- a. estimate the amount of capital required to absorb potential losses, if any, for the significant risks identified in the IRAP (particularly risks which lead to financial losses);
  - b. perform reasonable and proportionate sensitivity tests to analyse the impact of variation in the risk parameters of significant risks identified in the IRAP on the profitability and the capital position of the Authorised Person;

- c. estimate, using the range and distribution of possible losses estimated from historical data, the level of capital required reasonably to cover likely losses;
  - d. estimate the Capital Resources required to address potential variation in the Authorised Person's Capital Requirement arising from planned growth in business levels or any significant deviation in growth from plans; and
  - e. document the ranges of capital required for each of the factors identified above and enable the Governing Body and the senior management to form an overall view on the amount and quality of capital which that Authorised Person should hold.
- 6. The Regulator does not require an Authorised Person to implement ICAAP through sophisticated models and the Regulator has no prescribed approach for developing an internal capital model for the firm's ICAAP assessment. However, an Authorised Person should be able to demonstrate:
  - a. the confidence levels set and whether these are linked to its corporate strategy;
  - b. the time horizons set for the different types of business that it undertakes;
  - c. the extent of historic data used and back-testing carried out;
  - d. that it has in place a process to verify the correctness of the model's outputs; and
  - e. that it has the skills and resources to operate, maintain and develop the model.
- 7. If an Authorised Person's internal model makes explicit or implicit assumptions in relation to correlations within or between risk types, or in relation to diversification benefits between business lines, the firm should be able to explain to the Regulator, with the support of empirical evidence, the basis of those assumptions. An Authorised Person's model should also reflect the past experience of both the firm and the sectors in which it operates.
- 8. The assumptions required to aggregate risks that are modelled and the confidence levels adopted should be considered by the Authorised Person's senior management. An Authorised Person should also consider whether any relevant risks, including systems and control risks, are not captured by the model.
- 9. An Authorised Person using an internal capital model should validate the assumptions of the model through a comprehensive stress testing programme. In particular this validation should:
  - a. test correlation assumptions (where risks are aggregated in this way) using combined stresses and scenario analyses;

- b. use stress tests to identify the extent to which the firm's risk models omit non-linear effects, for instance the behaviour of Derivatives in Market Risk models; and
  - c. consider not just the effect of parallel shifts in interest rate curves, but also the effect of the curves becoming steeper or flatter.
- 10. Any internal assessment of capital adequacy should address diversification benefits and transferability of Capital Resources between members of the Financial Group. It should also describe the distribution of the capital required by the Financial Group across all entities, including the Authorised Person.

### **A11.3 Supervisory Review and Evaluation Process (SREP)**

#### **Guidance**

#### **Application**

- 1. This Guidance is relevant to an Authorised Person as described in Section 10.5 (that is, a firm in Category 1, 2, 3A, 3B, 3C or 5) in regard to a Supervisory Review and Evaluation Process (referred to in this Guidance as a SREP).

#### **Introduction**

- 2. This Guidance covers the evaluation criteria and methodology (referred to as a SREP) that the Regulator may use when reviewing and evaluating the IRAP and ICAAP of an Authorised Person.

#### **The SREP in detail**

- 3. A SREP of an IRAP and an ICAAP forms an integral part of the overall supervisory approach of the Regulator. A SREP is expected to enable assessment of the effectiveness, completeness and quality of an IRAP and ICAAP in relation to the overall risk profile of the Authorised Person. It leverages from information collected and assessments carried out as part of the wider supervisory regime, including desk-based reviews, on-site risk assessments, discussions with the firm's management, and reviews completed by internal and external Auditors.
- 4. The SREP is structured to provide consistency of treatment across Authorised Persons, taking into consideration the differences in risk profiles, business strategies and management. An essential element of the SREP is the qualitative assessment of each type of risk and its management within the overall context of the firm's internal governance.
- 5. The Regulator's assessment of the individual risk profile of an Authorised Person will provide the context for evaluation of the firm's IRAP and/or ICAAP. The evaluation in turn will be used by the Regulator to augment its understanding of the overall risk profile of a firm. Also, in relation to a firm in Category 1, 2, 3A or 5, the Regulator might involve such a firm in a formalised discussion of risks and capital adequacy, which might lead to a requirement for additional capital.

6. The SREP may be used as a regulatory tool for Authorised Persons which are required to perform an IRAP and/or ICAAP. The SREP for each Authorised Person will be proportionate in terms of the size, scale and complexity of its business and its impact on financial sector stability. The Regulator will cooperate actively with other supervisory authorities whenever an Authorised Person is part of a Group and is prudentially regulated on a consolidated basis.
7. The SREP evaluation cycle will be determined in the discretion of the Regulator and be based on the risk assessment, developments in the risk profile and changes in the Authorised Person's strategy or products. The SREP is as far as possible aligned with the risk assessment process to ensure that a recent risk assessment is available for the SREP evaluation process.
8. It is envisaged that the Regulator will use a range of supervisory tools of qualitative or quantitative nature to perform the SREP. The SREP is not intended as, and should not constitute, a parallel or secondary IRAP or ICAAP. Its purpose is to evaluate the quality, completeness and consistency of the IRAP or ICAAP of the Authorised Person.

#### **Review of the IRAP and ICAAP Assessment**

9. Upon receipt of an IRAP or ICAAP the Regulator would normally:
  - a. subject the data provided to an initial analysis for completeness and accuracy followed by a more detailed comparison with the relevant data held on file at the Regulator about the Authorised Person;
  - b. determine if there are material changes compared with previous submissions;
  - c. determine if the submitted data contains indicators of a possible material change in the firm's risk profile;
  - d. address and discuss any information gaps or anomalies with the firm; and
  - e. form an assessment about content and quality of the submission which will be integrated into the overall supervisory approach.

#### **Evaluation of the IRAP and ICAAP**

10. The SREP evaluation of the IRAP and, where applicable, the ICAAP covers all activities of an Authorised Person and takes all relevant data collected during the supervisory process into account. The SREP evaluation process will use desk based reviews, firm visits and meetings to arrive at a final view.
11. As part of the SREP, the Regulator will consider:
  - a. the completeness of the IRAP and, where applicable, the ICAAP by ensuring that it covers all business areas, internal governance and all risk categories of the Authorised Person;

- b. the soundness and quality of the IRAP and, where applicable, the ICAAP process in relation to the firm's size, business complexity and risk profile;
  - c. soundness of qualitative calibration and quantitative methodology whenever employed by the firm;
  - d. execution of the IRAP and, where applicable, the ICAAP in terms of consistency, quality and documentation;
  - e. adequacy of internal controls and quality assurance processes on the IRAP and, where applicable, the ICAAP; and
  - f. adequacy of management information and whether the management had responded adequately and in a timely manner to such information.
12. Based on the SREP, the Regulator will form an assessment which will be communicated to the Authorised Person and flow into the overall supervisory approach. The action required resulting from the IRAP and ICAAP will be communicated to the firm as part of a risk mitigation programme.
13. In relation to an Authorised Person in Category 1, 2, 3A or 5, where the Regulator does not agree with the results of the firm's ICAAP results, the Regulator will involve the firm in a dialogue to reconcile any difference in view to arrive at a consensus estimate of the capital level required to address all risks identified either by the firm or by the Regulator in its SREP. Such an estimate will be specified by the Regulator as the Individual Capital Requirement for the firm. Where consensus is not possible the Regulator may impose an Individual Capital Requirement on a firm.

**APP12PUBLIC DISCLOSURE REQUIREMENTS**
**Table 1 – Scope of application**

Qualitative Disclosures	(a)	The name of the Authorised Person.
	(b)	<p>In the case of a Financial Group, a list of all the entities forming part of the Financial Group and a brief description of each of those entities. In addition, a description of differences in the basis of consolidation for regulatory purposes compared to that required under the International Financial Reporting Standards. The description must include a brief description of the entities:</p> <ul style="list-style-type: none"> <li>(i) that are fully consolidated;</li> <li>(ii) that are consolidated on a pro-rata basis;</li> <li>(iv) that are equity-accounted</li> <li>(v) that are included as deductions from any of the components of Capital Resources;</li> <li>(v) from which surplus capital is recognised, if any; and</li> <li>(vi) that are not consolidated and not deducted.</li> </ul>
	(c)	Any restrictions or impediments on transfer of funds or regulatory capital within the Financial Group.

**Table 2 – Capital**

Qualitative Disclosures	(a)	A description of the terms and conditions and main features of all capital instruments included within every component of Capital Resources – CET 1 Capital, AT1 Capital and T2 Capital.
Quantitative Disclosures	(b)	<ul style="list-style-type: none"> <li>(i) Amounts of every element eligible for inclusion in CET1 Capital;</li> <li>(ii) Regulatory adjustments to CET1 Capital;</li> <li>(iii) Deductions from CET1 Capital; and</li> <li>(iv) Amount of total CET1 Capital.</li> </ul>
	(c)	<ul style="list-style-type: none"> <li>(i) Amounts of every element eligible for inclusion in AT1 Capital;</li> </ul>



		(ii) Regulatory adjustments to AT1 Capital;
		(iii) Deductions from AT1 Capital; and
		(iv) Amount of total AT1 Capital.
	(d)	(i) Amounts of every element eligible for inclusion in T2 Capital;
		(ii) Regulatory adjustments to T2 Capital;
		(iii) Deductions from T2 Capital; and
		(iv) Amount of total T2 Capital.
	(e)	Amount of eligible Capital Resources.

**Table 3 – Capital Adequacy and Leverage**

Qualitative Disclosures	(a)	A description of the overall capital management system and approach to assessing the adequacy of its capital to support current and future activities.  This should include description of systems, controls and processes for capital management and capital mobilisation plans for the medium term.
Quantitative Disclosures	(b)	(i) Total Credit Risk RWA;
		(ii) Amount of Credit RWA for each asset class giving rise to CR Exposures and Counterparty Risk Exposures, and for SE Exposures; and
		(iii) Amount of Credit RWAs for Early Amortisation Exposures, included in SE Exposures, if any.
	(c)	Market Risk Capital Requirement for each component of Market Risk as listed in Rule 5.1.1, calculated using:  (i) Rules prescribed in Chapter 5;
		(ii) Internal Models Approach;
		(iii) both (i) and (ii).
	(d)	Operational Risk Capital Requirement calculated under the following approaches, where applicable:
		(i) Basic Indicator Approach;
		(ii) Standardised Approach;

		(iii) Alternative Standardised Approach; or (iv) a combination of any of the above.
	(e)	Total Risk Exposure Amount at the solo and at the Financial Group level.
	(f)	(i) CET1 Capital ratio as a percentage of Total Risk Exposure Amount; (ii) T1 Capital ratio as a percentage of Total Risk Exposure Amount; (iii) Capital Resources as a percentage of Total Risk Exposure Amount; and (iv) These ratios must be disclosed at both the Authorised Person level and at the Financial Group level.
	(g)	The ratios referred to in (f) must be disclosed for each significant entity in the case of a Financial Group.
	(h)	(i) The Leverage Ratio; (ii) the Capital Measure; and (iii) the Exposure Measure.

**Table 4 – Liquidity Risk**

Quantitative Disclosures	(a)	(i) The Liquidity Coverage Ratio;
		(ii) total high-quality liquid assets (HQLA) – unweighted;
		(iii) total high-quality liquid assets (HQLA) – weighted;
		(iv) total net cash outflows – unweighted; and
		(v) total net cash outflows – weighted.
	(b)	(i) The Net Stable Funding Ratio;
		(ii) Available Stable Funding – capital instruments;
		(iii) Available Stable Funding – other liabilities;
		(iv) Required Stable Funding – assets; and
		(v) Required Stable Funding – off-balance sheet items.