



Guernsey Financial Services Commission
Isle of Man Financial Supervision Commission
Jersey Financial Services Commission

Basel II – Operational Risk

May 2007

Introduction

In 1988 the Basel Committee on Banking Supervision ("Basel Committee") issued a report entitled "International Convergence of Capital Measurement and Capital Standards". The report was updated in 1997. Its purpose was to secure international convergence of supervisory regulations governing the capital adequacy of international banks. The report has become known in recent years as "Basel I".

Latterly, the Basel Committee has worked to revise Basel I. The new revised framework was last updated in November 2005 and was re-issued as a "Comprehensive Version" in June 2006. The revised framework is referred to hereafter as "Basel II".

Basel II introduces a requirement for holding capital to cover operational risk¹ and prescribes three methods for calculating required levels, each progressing in sophistication and risk sensitivity. These are:

- The Basic Indicator Approach;
- The Standardised Approach; and
- The Advanced Measurement Approaches.

A fourth approach, an alternative to the Standardised Approach, is available by National Discretion titled the Alternative Standardised Approach. This discretion has been exercised in the pan-island approach described herein.

The Pan-Island Approach

The Guernsey Financial Services Commission, the Isle of Man Financial Supervision Commission and the Jersey Financial Services Commission have been working together to establish a unified approach, wherever possible, to implementing Basel II. This is not only because a number of banks operate in all three (or two of the three) jurisdictions, but also because their geographical proximity and similar constitutions leave them vulnerable to regulatory arbitrage if a common approach is not reached.

The publication of two previous papers has reflected this unified approach and brought together work carried out by each island's Basel II implementation teams. The papers were:

- "National Discretions for the Standardised Approaches to Credit and Operational Risk under the Basel II Capital Framework", issued in

¹ Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This definition includes legal risk but excludes strategic and reputational risk. Legal risk includes, but is not limited to, exposure to fines, penalties, or punitive damages resulting from supervisory actions as well as private settlements.

August 2006 and revised in November 2006 (hereafter referred to as the “Tri-party National Discretion paper”), and

- “Basel II – External Credit Assessment Institutions’ Ratings and Mapping of Ratings to Risk Weights”, issued in October 2006 and revised in November 2006.

This paper expands further on the co-operation between the islands and is the first in a series of planned Tri-Party publications of detailed guidance for the implementation of the Basel II framework.

Throughout this publication, the three Commissions are referred to as the “Tri-party Group”, and the three islands as the Crown Dependencies. Any further use of the word “Commission” refers to the relevant individual Commission.

It is the Tri-party Group’s understanding that the vast majority of banks in the Crown Dependencies will be adopting either the Basic Indicator Approach or Standardised Approach to operational risk under Basel II. This paper therefore focuses on these, rather than the Advanced Measurement Approaches (“AMA”), which will be developed on a bespoke basis with individual banks.

Basel II, Pillar 1 – An overview of operational risk

The three methods for calculating operational risk capital charges vary in sophistication and risk sensitivity. The approach of the Basel Committee has been to encourage banks to move along the spectrum of available approaches as they develop more sophisticated operational risk measurement systems and practices. However, qualifying criteria have to be met for banks wishing to adopt the Standardised Approach or AMA. For some banks in the Crown Dependencies it may be the case that the Basic Indicator Approach will continue to be an adequate method (based on the risk profile and type of business conducted by the bank) for calculating the operational risk capital charge under Pillar 1.

Internationally active banking groups and banks with significant operational exposures are generally expected to use an approach that is more sophisticated than the Basic Indicator Approach and that is appropriate for the risk profile of the bank, although a simpler approach may be applied by subsidiaries. A banking group may also be permitted to use the Basic Indicator or Standardised Approach for some parts of its operations and an AMA for others provided certain minimum criteria are met as established under Basel II. This split approach will not be applicable to a subsidiary in the Crown Dependencies (but may apply to groups of which subsidiaries in the Crown Dependencies are a part).

A bank must not revert to a simpler approach once it has been approved for a more advanced approach without Commission approval. However, if the Commission determines that a bank using a more advanced approach no longer meets the qualifying criteria for that approach, it may require the bank to revert to a simpler approach for some or all of its operations, until it meets the conditions specified by the Commission for returning to a more advanced approach.

The Commission encourages banks to comply with the Basel Committee's guidance on "*Sound Practices for the Management and Supervision of Operational Risk, February 2003*", and any relevant future guidance that may be published by the Commission.

The Basic Indicator Approach

Overview

Banks using the Basic Indicator Approach must hold capital for operational risk that is at least equal to the average over the previous three years of 15% (denoted "Alpha") of positive annual gross income. Gross income is a proxy for the scale of operational risk exposure of a bank and in some cases (e.g. for banks with low margins or profitability) can underestimate the need for capital for operational risk. Any perceived shortfall of capital held for operational risk would need to be addressed in the supervisory review and evaluation process under Pillar 2 of Basel II.

Detailed Reporting Requirements and Guidance

Schedule 1 provides a prudential reporting form and associated guidance/completion notes which have been agreed by the Tri-party Group. The Commission will incorporate these (subject to any final changes in format and referencing) into a set of Basel II compliant prudential reporting forms in time for Basel II implementation.

Qualifying Criteria

No specific qualifying criteria have been established but this approach will generally be applicable to banks with non-complex activities.

The Standardised Approach

Overview

In the Standardised Approach, banks' activities are divided into eight business lines: corporate finance, trading and sales, retail banking,

commercial banking, payment and settlement, agency services, asset management and retail brokerage.

Within each business line, gross income is a broad indicator that serves as a proxy for the scale of the business operations and thus the likely scale of operational risk exposure within each of the business lines. The capital charge for each business line is calculated by multiplying gross income by a scaling factor for that business line (denoted "Beta"). Factors vary between business lines, ranging from 12% to 18%.

Gross income is measured for each business line. The total capital charge is calculated as the three year average of the simple summation of the capital charges across each business line in each year. In some cases (e.g. for banks with low margins or low profitability), using gross income can underestimate the need for capital for operational risk. Any perceived shortfall of capital held for operational risk would need to be addressed in the supervisory review and evaluation process under Pillar 2 of Basel II.

Detailed Reporting Requirements and Guidance

Schedule 1 provides a template reporting form and associated guidance/completion notes which have been agreed by the Tri-party Group. The Commission will incorporate these (subject to any final changes in format and referencing) into a set of Basel II compliant prudential reporting forms in time for Basel II implementation.

Mapping of Business Lines

Annex C to *Schedule 1* provides principles and guidance to banks for business line mapping. The Commission will incorporate this guidance into a set of Basel II compliant prudential reporting forms, guidance/completion notes in time for Basel II implementation.

Banks wishing to adopt the Standardised Approach should address the mapping principles in detail, especially in relation to retail and commercial banking, which are likely to represent significant income streams for a high proportion of banks in the Crown Dependencies. (It should be noted that private banking income is included within retail banking income.)

Qualifying Criteria

Schedule 2 provides the Tri-party Group's criteria, which will be adopted by the Commission, to permit banks to qualify for use of the Standardised Approach.

The Alternative Standardised Approach ("ASA")

Overview

This is an alternative to the Standardised Approach, using the same business line categories. For some banks gross income may not be the most appropriate indicator to use when calculating the operational risk capital charge under Basel II. The Tri-Party Group published its adopted stance in respect of the Alternative Standardised Approach in the Tri-party National Discretion paper. This stated the following:

The Tri-party Group will permit banks to use the ASA for operational risk, subject to banks being able to satisfy their supervisor that this alternative approach provides an improved basis of calculation. For the ASA permitted in the Crown Dependencies, banks will be required to aggregate retail and commercial banking business lines and calculate the capital charge using the amount of loans and advances (multiplied by a fixed factor of 0.035) as the exposure indicator, instead of gross income. The capital charge for these lines will be 15% of this amount. The gross income for the other six business lines is aggregated and a factor of 18% then applied.

Once a bank has been allowed to use the ASA it may not revert to the Standardised Approach without the permission of the Commission.

Detailed Reporting Requirements and Guidance

Schedule 1 provides a template reporting form and associated guidance/completion notes which have been agreed by the Tri-party Group. The Commission will incorporate these (subject to any final changes in format and referencing) into a set of Basel II compliant prudential reporting forms in time for Basel II implementation.

Mapping of Business Lines

Annex D to Schedule 1 provides principles and guidance to banks for business line mapping. The Commission will incorporate this guidance into a set of Basel II compliant prudential reporting forms guidance/completion notes in time for Basel II implementation.

Qualifying Criteria

Schedule 3 provides the Tri-party Group's criteria, which will be adopted by the Commission, to permit banks to qualify for use of the Alternative Standardised Approach. This is broadly similar to the criteria detailed in *Schedule 2* for the Standardised Approach.

The Advanced Measurement Approaches ("AMA")

Overview

It would not be an effective use of the Commission's resources to develop the capability to validate a bank's AMA models (including hybrid AMA approaches comprising both a group AMA and a capital allocation method for individual entities) without drawing on input from home regulators.

Banks may apply to use AMA for operational risk providing:

- The process adequately reflects the local bank's risk profile;
- The outputs will be adequate for the Commission's assessment purposes;
- Ongoing adequate validation and support from the home / lead supervisor will be available;
- The data utilised in the bank's models is relevant to the risks facing the local subsidiary; and
- The local bank has adequate knowledge and resources available locally to enable it to effectively implement the AMA.

The Commission will not be in a position to waive the requirement of a bank to report under the standardised approaches, unless it is satisfied with the above five conditions. Approval of advanced approaches will normally only be given once the home supervisor has approved a group model. It will be done on a case by case basis.

The Commission will also have due regard to the following Basel Committee documents when assessing applications for approval of use of the AMA:

- *"Home-Host information sharing for effective Basel II implementation"*, issued June 2006 ; and,
- *"Principles for home-host supervisory cooperation and allocation mechanisms in the context of Advanced Measurement Approaches (AMA)"*, a consultation document issued February 2007.

Even though advanced approaches are primarily developed at group level, local management will be expected to understand and manage their bank's risk profile and ensure that it is adequately capitalised. A bank should therefore have, or have access to, adequate information that is directly relevant to it, and be able to make available this information to the Commission when requested. Examples of such information may include:

- Plans at a local level for measuring operational risks;
- Evidence of how the local bank's internal operational risk measurement system is integrated into its day-to-day risk management process. For example, information from the AMA model must play a

prominent role in risk reporting, management reporting, internal capital allocation, and risk analysis;

- How the group approach to Pillar 2 will be applied locally to meet any requirements to include operational risk mitigants in Pillar 2 which address risks which are not captured in the AMA; and
- How group systems and processes will be applied in the local market.

The Commission encourages banks that wish to adopt advanced approaches (credit or operational risk) to keep it informed of progress in the home regulator approval process. This will assist the Commission in its dialogue with home supervisors.

Detailed Reporting Requirements and Guidance

The Commission will require banks to complete a set of Basel II compliant prudential reporting forms which will include capital (and risk weighted asset equivalent) figures for the operational risk charge on a quarterly basis. Individual reporting requirements will be agreed as part of the approval process.

Qualifying Criteria

If a banking group wishes to adopt the AMA it must meet certain minimum qualitative and quantitative criteria as established under Basel II. This will be assessed as part of the home/lead supervisor's validation that, as already stated, forms part of the Commission's considerations. These criteria include the availability of sufficient data, adequacy of models and the use test.

Any queries relating to the information contained in this paper should be addressed in the first instance to the persons below, as appropriate to the place of incorporation of the bank concerned.

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Schedule 1 – Reporting Forms, Guidance/Completion Notes and Principles and Guidance for Business Line Mapping for Operational Risk Capital Calculations under the Basic Indicator, Standardised and Alternative Standardised Approaches

Reporting Forms

Basic Indicator Approach

1.1 BASIC INDICATOR APPROACH ("BIA")				
Item	Nature of Item	Value		
A	BIA as agreed approach?			
Item	Nature of Item	Last year	1 year prior	2 years prior
B	Gross Income comprising:			
B.1	Net Interest Income			
B.2	Net Non-Interest Income			
	TOTAL	0	0	0
Item	Nature of Item	Value		
C	BIA Calculation			
C.1	Average Income, where positive	0		
C.2	Alpha	15%		
Item	Nature of Item	Capital Charge	RWA Equivalent	
D	BIA Requirement	0	0	

Standardised Approach

1.2 STANDARDISED APPROACH TO OPERATIONAL RISK ("SAO")

Item	Nature of Item	Value
A	SAO as agreed approach?	

Item	Nature of Item	Last year	1 year prior	2 years prior
B	Income			
B.1	Corporate Finance			
B.2	Trading and sales			
B.3	Retail banking			
B.4	Commercial banking			
B.5	Payment and settlement			
B.6	Agency services			
B.7	Asset management			
B.8	Retail Brokerage			
TOTAL		0	0	0

Item	Nature of Item	Beta	Last year	1 year prior	2 years prior
C	Capital Charge				
C.1	Corporate Finance	18%	0	0	0
C.2	Trading and sales	18%	0	0	0
C.3	Retail banking	12%	0	0	0
C.4	Commercial banking	15%	0	0	0
C.5	Payment and settlement	18%	0	0	0
C.6	Agency services	15%	0	0	0
C.7	Asset management	12%	0	0	0
C.8	Retail Brokerage	12%	0	0	0
TOTAL			0	0	0

Item	Nature of Item	Capital Charge	RWA Equivalent
D	SAO Requirement	0	0

Alternative Standardised Approach

1.3 ALTERNATIVE STANDARDISED APPROACH ("ASA")					
Item	Nature of Item	Value			
A	ASA as agreed approach?				
Item	Nature of Item		Last year	1 year prior	2 years prior
B	Retail/Commercial Lending - Volume				
Item	Nature of Item	Fixed factor "m"	Last year	1 year prior	2 years prior
C	Income				
C.1	Retail/Commercial Lending	3.5%	0	0	0
C.2	All other income				
	TOTAL		0	0	0
Item	Nature of Item	Beta	Last year	1 year prior	2 years prior
D	Capital Charge				
D.1	Retail/Commercial Lending	15%	0	0	0
D.2	All other income	18%	0	0	0
	TOTAL		0	0	0
Item	Nature of Item	Capital Charge	RWA Equivalent		
E	ASA Requirement	0	0		

Guidance / Completion Notes

Section 1 – Introduction

Each Commission will insert its own introduction as deemed appropriate.

Section 2 – Definition of Year of Operation

Under the BIA and SAO, the bank's capital charge for operational risk is calculated using gross income data from the last three years.

The ASA also offers the option of calculating the capital charge through using the average volume of loans and advances ("loans and advances" hereafter are simply referred to as "advances") for each of those years. Year one is the last completed accounting year, years two and three are the two immediately preceding accounting years.

The Risk Weighted Assets ("RWA") "equivalent amount" is derived by multiplying the capital charge by 12.5, as established in Basel II. This is combined with the RWA derived for credit risk and other risks to arrive at the total RWA of the bank.

A bank should treat any partial year of operation of six months or more as a full year. Any partial year of operation of less than six months should be disregarded. If any partial year is counted as a full year, the gross income of

that partial year should be annualised. Under the ASA, the mean average of the amount of advances outstanding at the end of each full calendar quarter within that partial year should be taken as the average level of advances for that year.

An illustration of calculating the gross income and advances in the retail and commercial banking business lines for partial and full years of operation is shown in *Annex A*.

Section 3 – Guidance on Form Completion

General layout

There are three different reporting forms (see above), covering:

- Basic Indicator Approach, Form 1.1;
- Standardised Approach, Form 1.2; and
- Alternative Standardised Approach, Form 1.3.

The bank will have agreed with the Commission which approach it will use. A completed example of each form is included in *Annex B*.

Section A of each form asks if this approach is the agreed approach. This section should be completed by entering “YES” in the form for the agreed approach, and “NO” in the forms for the other two approaches. The forms where “NO” has been indicated should be left blank.

Form 1.1 Basic Indicator Approach (“BIA”)

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

Section B: Gross Income comprising:

Item	Item Name	Definition
B.1	Net Interest Income	<i>Interest Income net of Interest Expense, for each of the three preceding years, gross of any provisions (e.g. for unpaid interest).</i>
B.2	Net Non-Interest Income	<i>Net non-interest income for each of the three preceding years. Note that this is gross of operating expenses (including fees paid to outsourcing service providers) and should exclude realised profits/losses from the sale of securities in the banking book and extraordinary or irregular items as well as income derived from insurance.</i>

Section C: BIA Calculation

"Average Income" is calculated as the sum of the two items, shown in section B, for each year where the said sum was positive, divided by the number of those years.

Section D: BIA Requirement

The capital charge for the BIA is calculated as 15% of Average Income. The RWA equivalent for the BIA is calculated by multiplying the capital charge by 12.5.

Form 1.2 Standardised Approach to Operational Risk ("SAO")

The SAO requires the bank to allocate income by business line for each of the previous three years. Multiplying these income amounts by the appropriate scaling factor for that business line (denoted "Beta") gives the capital charge for each of these lines. Adding together the capital charges of each line gives the total charge for a year. Beta varies from 12% to 18%, as specified in Basel II. The RWA equivalent is derived from the average of these yearly capital charges, ignoring those where the capital charge derived is not positive.

Section B: Income

Item	Item Name	Beta	Definition
B.1	Corporate Finance	18%	▪ <i>Net fees and commission earned.</i>
B.2	Trading & Sales	18%	▪ <i>Profits/losses on instruments held for trading purposes, net of funding costs.</i> ▪ <i>Fees from wholesale broking.</i>
B.3	Retail Banking	12%	▪ <i>Net interest income on advances to retail</i>

			<i>customers and small businesses treated as retail.</i> <ul style="list-style-type: none"> <i>Fees related to retail activities.</i> <i>Net income from swaps and derivatives held to hedge the retail banking book.</i> <i>Income on purchased retail receivables.</i>
B.4	Commercial Banking	15%	<ul style="list-style-type: none"> <i>Net interest income on advances to corporate, bank and sovereign customers.</i> <i>Income on purchased corporate receivables.</i> <i>Fees related to commercial banking activities including commitments, guarantees and bills of exchange.</i> <i>Net income on securities held in the banking book.</i> <i>Profits/losses on swaps and derivatives held to hedge the commercial banking book.</i>
B.5	Payment & Settlement	18%	<ul style="list-style-type: none"> <i>Net fees/commissions earned.</i> <i>Fees for provision of payments/settlement facilities for wholesale counterparties.</i>
B.6	Agency Services	15%	<ul style="list-style-type: none"> <i>Net fees and commission earned.</i>
B.7	Asset Management	12%	<ul style="list-style-type: none"> <i>Net fees and commission earned.</i>
B.8	Retail Brokerage	12%	<ul style="list-style-type: none"> <i>Net fees and commission earned.</i>

All income of the bank must be allocated to a business line in accordance with the principles and guidance of business line mapping shown in annex C.

Section C: Capital Charge

The capital charge for each year is derived by:

- Multiplying the income reported in Section B by the appropriate Beta for each business line to get the charge for that line; and
- Adding together the eight capital charges thus calculated for the business lines.

In any given year, positive capital charges for any individual lines may be offset by negative capital charges for other business lines in that year without limit. However, where the aggregate capital charge across all business lines within a given year is negative, then the input to the numerator for that year will be zero.

Section D: "SAO Requirement"

The capital charge for the SAO is calculated as the sum of the three yearly capital charges, where positive, divided by the number of those years. The "RWA equivalent" for the SAO is calculated by multiplying this capital charge by 12.5.

Form 1.3 Alternative Standardised Approach ("ASA")

The ASA is an available option within Basel II. It uses an alternative proxy for operational risk in respect of both retail and corporate lending. Total retail and corporate advances (not risk weighted and gross of provisions) are multiplied by a fixed factor 0.035 (i.e. 3.5%) which has been calculated by the Basel Committee (denoted "m").

The capital charge is then calculated by applying a scale factor, Beta, of 15% to this amount, then adding a sum equivalent to 18% of all other income.

Section B: "Retail/Commercial Lending – Volume"

Enter average retail and commercial lending balances based on quarter end balances of the relevant year.

Section C: Income

Item	Item Name	Beta	Definition
C.1	Retail /Commercial Lending	15%	3.5% of the average volume reported in Section B above, as an alternative proxy for operational risk from these two business lines.
C.2	All Other income	18%	Gross income from all business lines except retail and commercial lending as per the SAO definitions

All income of the bank must be allocated to a business line in accordance with the principles and guidance of business line mapping shown in annex D.

Section D: Capital Charge

The capital charge for each year is derived by:

- Multiplying the income reported in Section C by the appropriate "Beta" for each business line to get the charge for that line; and
- Adding together both capital charges thus calculated for the business lines.

A negative capital charge for "All other income" can offset that derived for Retail/Commercial lending. However, where the aggregate capital charge within a given year is negative, then the input to the numerator for that year will be zero.

Section E: "ASA Requirement"

The capital charge for the ASA is calculated as the sum of the three yearly capital charges, where positive, divided by the number of those years. The "RWA equivalent" for the ASA is calculated by multiplying this capital charge by 12.5.

Annex A – Examples of Full and Partial Year Treatments

Example 1: Three or more full years

If a bank:

- Had an accounting year that matched the calendar year;
- Had commenced operations prior to 1/1/2006; and
- Wished to report for Q4 2008, or any of the first three quarters in 2009, then:

“Last Year” would be 2008: report full year’s gross income and, for the ASA only, report the average of advances as reported at end Q1, Q2, Q3 and Q4 2008.

“1 year prior” would be 2007: derived in equivalent fashion to “Last Year”.

“2 years prior” would be 2006.

Example 2: One full year plus one year of more than six months duration

If a bank:

- Had an accounting year that matched the calendar year;
- Had commenced operations on 1/4/2007; and
- Wished to report for Q4 2008, or any of the first three quarters in 2009, then:

“Last Year” would be 2008: report full year’s gross income and, for the ASA only, report the average of advances as reported at end Q1, Q2, Q3 and Q4 2008.

“1 year prior” would be 2007: annualise this partial year’s gross income; in this case by dividing by nine (number of months of operation) and multiplying by twelve, and, only for the ASA, report the average of advances reported at end Q2, Q3 and Q4 2007.

“2 years prior” would be 2006: report zero for gross income and, for the ASA only, report zero advances. The calculation disregards these figures.

Example 3: Two full years plus one year of less than 6 months duration

If a bank:

- Had an accounting year that matched the calendar year;
- Had commenced operations on 1/9/2006; and

- Wished to report for Q4 2008, or any of the first three quarters in 2009, then:

"Last Year" would be 2008: report full year's gross income and, for the ASA only, report the average of advances as reported at end Q1, Q2, Q3 and Q4 2008.

"1 year prior" would be 2007: derived in equivalent fashion to "Last Year".

"2 years prior" would be 2006: report zero for gross income and, for the ASA only, report zero advances. The calculation disregards these figures.

Annex B – Completion Examples

Introduction

The example data given in the tables below has been used to complete the form overleaf for illustrative purposes.

Whilst the form has been completed for all three options in reality the form would only be completed for the option that the bank had agreed, with the form left blank for the other options.

Gross Income

	2008		2007		2006	
Business Line	Net Interest Income	Net Non-Interest Income	Net Interest Income	Net Non-Interest Income	Net Interest Income	Net Non-Interest Income
Corporate Finance	0	1,200	0	1,100	0	1,000
Trading & Sales	0	2,000	0	-1,000	0	0
Retail Banking	5,000	-1,000	5,500	-1,000	6,000	-1,000
Commercial Banking	1,000	-2,000	-1,000	-3,000	0	0
Payment & Settlement	0	300	0	150	0	200
Agency Services	0	55	0	45	0	50
Asset Management	0	1000	0	-500	0	0
Retail Brokerage	0	1500	0	-500	0	0

Loans and Advances

Business Line	2008	2007	2006
Retail	80,000	90,000	100,000
Commercial	80,000	40,000	0

Completed Form**3.1 BASIC INDICATOR APPROACH ("BIA")**

Item	Nature of Item	Value
A	BIA as agreed approach?	YES

Item	Nature of Item	Last year	1 year prior	2 years prior
B	Income			
B.1	Net Interest Income	6,000	4,500	6,000
B.2	Net Non-Interest Income	3,055	(4,705)	250
TOTAL		9,055	(205)	6,250

Item	Nature of Item	Value
C	BIA Calculation	
C.1	Average Income, where positive	7,653
C.2	Alpha	15%

Item	Nature of Item	Capital Charge	RWA Equivalent
D	BIA Requirement	1,148	14,348

3.2 STANDARDISED APPROACH TO OPERATIONAL RISK ("SAO")

Item	Nature of Item	Value
A	SAO as agreed approach?	YES

Item	Nature of Item	Last year	1 year prior	2 years prior
B	Income			
B.1	Corporate Finance	1,200	1,100	1,000
B.2	Trading and sales	2,000	(1,000)	0
B.3	Retail banking	4,000	4,500	5,000
B.4	Commercial banking	(1,000)	(4,000)	0
B.5	Payment and settlement	300	150	200
B.6	Agency services	55	45	50
B.7	Asset management	1,000	(500)	0
B.8	Retail Brokerage	1,500	(500)	0
TOTAL		9,055	(205)	6,250

Item	Nature of Item	Beta	Last year	1 year prior	2 years prior
C	Capital Charge				
C.1	Corporate Finance	18%	216	198	180
C.2	Trading and sales	18%	360	(180)	0
C.3	Retail banking	12%	480	540	600
C.4	Commercial banking	15%	(150)	(600)	0
C.5	Payment and settlement	18%	54	27	36
C.6	Agency services	15%	8	7	8
C.7	Asset management	12%	120	(60)	0
C.8	Retail Brokerage	12%	180	(60)	0
TOTAL			1,268	0	824

Item	Nature of Item	Capital Charge	RWA Equivalent
D	SAO Requirement	1,046	13,073

3.3 ALTERNATIVE STANDARDISED APPROACH ("ASA")

Item	Nature of Item	Value
A	ASA as agreed approach?	YES

Item	Nature of Item	Last year	1 year prior	2 years prior
B	Retail/Commercial Lending - Volume	160,000	130,000	100,000

Item	Nature of Item	Proxy based Percentage	Last year	1 year prior	2 years prior
C	Income				
C.1	Retail/Commercial Lending	3.50%	5,600	4,550	3,500
C.2	All other income		6,055	(705)	1,250
TOTAL			11,655	3,845	4,750

Item	Nature of Item	Beta	Last year	1 year prior	2 years prior
D	Capital Charge				
D.1	Retail/Commercial Lending	15%	840	683	525
D.2	All other income	18%	1,090	(127)	225
TOTAL			1,930	556	750

Item	Nature of Item	Capital Charge	RWA Equivalent
E	ASA Requirement	1,079	13,481

Annex C - Principles and Guidance for Business Line Mapping under the Standardised Approach

Summary of Business Lines, Activity Groups and Income Definitions

Business Line	Major Business Segments	Activity Groups	Charge as % of gross income	Gross income definition
Corporate Finance	Corporate Finance	Mergers and Acquisitions, Underwriting, Privatisations, Securitisation, Research, Debt (Government / High Yield), Equity, Syndications, IPO, Secondary Private Placements	18	Net fees / commissions earned in each business line.
	Municipal/Government Finance			
	Merchant Banking			
	Advisory Services			
Trading & Sales	Sales	Fixed income, equity, foreign exchange, commodities, credit, funding, own position securities, lending and repos, brokerage, debt, prime brokerage	18	Profits / losses on instruments held for trading purposes, net of funding cost. Fees from wholesale broking.
	Market Making			
	Proprietary Positions			
	Treasury			
Retail Banking	Retail Banking	Retail lending and deposits, banking services, trust and estates	12	Net interest income on loans and advances to retail customers and small businesses treated as retail. Fees related to traditional retail activities. Net income from swaps and derivatives held to hedge the retail banking book. Income on purchased retail receivables.
	Private Banking	Private lending and deposits, banking services, trusts 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, lends, guarantees, bills of exchange	15	Net interest income on loans and advances to corporate, inter-bank and sovereign customers.

				<p>Income on purchased corporate receivables.</p> <p>Fees related to traditional commercial banking activities including commitments, guarantees, bills of exchange.</p> <p>Net interest income on securities held in the banking book.</p> <p>Profits/losses on swaps and derivatives held to hedge the commercial banking book.</p>
Payment & Settlement	External Clients	Payments and collections, fund transfer, clearing and settlement	18	<p>Net fees / commissions earned.</p> <p>Fees to cover provision of payments / settlement facilities for wholesale counterparties.</p>
Agency Services	Custody	Escrow, Depository receipts, Securities lending (customers), Corporate actions	15	Net fees / commissions earned in each business.
	Corporate Agency	Issuer and paying agents, Agency services		
	Corporate Trust			
Asset Management	Discretionary Fund Management	Pooled, segregated, retail, institutional, closed, open, private equity	12	Net fees / commissions earned in each business.
	Non-Discretionary Fund Management	Pooled, segregated, retail, institution, closed, open		
Retail Brokerage	Retail Brokerage	Execution and full service	12	Net fees / commissions earned in each business.

Annex C - Principles and Guidance for Business Line Mapping under the Standardised Approach - continued

- (a) All activities must be mapped into the eight business lines in a mutually exclusive and jointly exhaustive manner. All income must be allocated to one of the business lines.
- (b) Any banking or non-banking activity which cannot be readily mapped into the business line framework, but which represents an ancillary function to an activity included in the framework, must be allocated to the business line it supports. If more than one business line is supported through the ancillary activity, an objective mapping criterion must be consistently adopted and the reasoning behind adopting that criterion recorded by the bank.
- (c) When mapping gross income, if an activity cannot be mapped into a particular business line then the business line yielding the highest capital charge must be used. The same business line will apply to any associated ancillary activity.
- (d) Banks may use internal pricing methods to allocate gross income between business lines provided that total gross income for the bank (as would be recorded under the Basic Indicator Approach) still equals the sum of gross income for the eight business lines.
- (e) The mapping of activities into business lines for operational risk capital purposes must 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 must be clearly explained and documented.
- (f) The mapping process used must be clearly documented. In particular, written business line definitions must be clear and detailed enough to allow third parties to replicate the business line mapping. Documentation must, among other things, clearly record any exceptions or overrides.
- (g) Processes must be in place to define the mapping of any new activities or products.
- (h) Senior management is responsible for the mapping policy (which is subject to the approval by the board of directors).
- (i) The mapping process to business lines must be subject to independent review.

Supplementary Business Line Mapping Guidance

There are a variety of valid approaches that banks can use to map their activities to the eight business lines, provided the approach used meets the business line mapping principles (above). Nevertheless, the Tri-party Group is aware that some

banks would welcome further guidance. The following is therefore an example of one possible approach that could be used by a bank to map its *gross income*:

Gross income for retail banking consists of net interest income on loans and advances to retail customers (which includes private banking customers) and SMEs treated as retail, plus fees related to traditional retail activities, net income from swaps and derivatives held to hedge the retail banking book, and income on purchased retail receivables. To calculate net interest income for retail banking, a bank takes the interest earned on its loans and advances to retail customers less the average cost of funding of the loans (from whatever source - retail or other deposits).

Similarly, *gross income for commercial banking* consists of the net interest income on loans and advances to corporate (plus SMEs treated as corporate), interbank (including placements with other group or parent banks) and sovereign customers and income on purchased corporate receivables, plus fees related to traditional commercial banking activities including commitments, guarantees, bills of exchange, net income (e.g. from coupons and dividends) on securities held in the banking book, and profits/losses on swaps and derivatives held to hedge the commercial banking book. Again, the calculation of net interest income is based on interest earned on loans and advances to corporate, interbank and sovereign customers less the average cost of funding for these loans (from whatever source).

For trading and sales, gross income consists of profits/losses on instruments held for trading purposes (i.e. in the mark-to-market book), net of funding cost, plus fees from wholesale broking.

For the other five business lines, gross income consists primarily of the net fees/commissions earned in each of these businesses. *Payment and settlement* consists of fees to cover provision of payment/settlement facilities for wholesale counterparties. *Asset management* is management of assets on behalf of others.

Annex D – Principles and Guidance for Business Line Mapping under the Alternative Standardised Approach

Principles for Business Line Mapping

(a) All activities must be mapped into the two aggregated business lines (retail and commercial banking together, and the six other together) in a mutually exclusive and jointly exhaustive manner. All income must be allocated to one of the business lines.

(b) Any banking or non-banking activity which cannot be readily mapped into the business line framework, but which represents an ancillary function to an activity included in the framework, must be allocated to the business line it supports. If more than one business line is supported through the ancillary activity, an objective mapping criterion must be consistently adopted and the reasoning behind adopting that criterion recorded by the bank.

(c) The mapping of activities into business lines for operational risk capital purposes must 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 must be clearly explained and documented.

(d) The mapping process used must be clearly documented. In particular, written business line definitions must be clear and detailed enough to allow third parties to replicate the business line mapping. Documentation must, among other things, clearly record any exceptions or overrides.

(e) Processes must be in place to define the mapping of any new activities or products.

(f) Senior management is responsible for the mapping policy (which is subject to the approval by the board of directors).

(g) The mapping process to business lines must be subject to independent review.

Supplementary Business Line Mapping Guidance

There are a variety of valid approaches that banks can use to map their activities to the aggregated business lines, provided the approach used meets the business line mapping principles (above). Nevertheless, the Tri-party Group is aware that some banks would welcome further guidance. The following is therefore an example of one possible approach that could be used by a bank to map its *total loans and advances* (for retail and commercial banking aggregated), and *gross income* for the other six business lines (aggregated):

Total loans and advances in the retail banking business line consist of the total drawn amounts (gross of provisions) in the following credit portfolios: retail (including private banking), SMEs treated as retail, and purchased retail receivables. For *commercial banking*, total loans and advances consist of the drawn amounts (gross of provisions) in the following credit portfolios: corporate, sovereign, interbank (including placements with other group, or parent, banks), specialised lending, SMEs treated as corporate and purchased corporate receivables. The book value of securities held in the banking book should also be included.

In respect of the other six business lines, which are based on gross income, in order to disaggregate them from income derived from retail and commercial banking the following may help:

For trading and sales, gross income consists of profits/losses on instruments held for trading purposes (i.e. in the mark-to-market banking book), net of funding cost, plus fees from wholesale broking.

For the other five business lines, gross income consists primarily of the net fees/commissions earned in each of these business activities. *Payment and settlement* consists of fees to cover provision of payment/settlement facilities for wholesale counterparties. *Asset management* is management of assets on behalf of others.

Schedule 2 – Qualifying Criteria – The Standardised Approach

Qualifying criteria for all banks wishing to use the Standardised Approach

(a) In order to qualify for use of the Standardised Approach, a bank must satisfy the Commission that, as a minimum:

- Its board of directors and senior management, as appropriate, are actively involved in the oversight of the operational risk management framework;
- It has an operational risk management system that is conceptually sound and is implemented with integrity; and
- It has sufficient resources in the use of the approach in the major business lines as well as the control and audit areas.

(b) The Commission will have the right to insist on a period of initial monitoring of a bank's Standardised Approach before it is used for regulatory capital purposes.

(c) A bank must develop specific policies and have documented criteria for mapping gross income for current business lines and activities into the standardised framework. The criteria must be reviewed and adjusted for new or changing business activities as appropriate. The principles for business line mapping are set out in *Annex C to Schedule 1*.

The Commission also recommends that banks which are not considered to be internationally active banks should nevertheless have due regard to the additional qualifying criteria stated below. The Commission will consider the additional criteria, taking into account the nature of a bank's activities, when assessing whether a bank may qualify to adopt the Standardised Approach.

Additional qualifying criteria for internationally active banks²

An internationally active bank wishing to use the Standardised Approach must meet the following additional criteria:

(a) The bank must have an operational risk management system with clear responsibilities assigned to an operational risk management function. The operational risk management function is responsible for developing strategies to identify, assess, monitor and control/mitigate operational risk; for codifying firm-level policies and procedures concerning operational risk management and controls; for the design and implementation of the firm's operational risk assessment methodology; and for the design and implementation of a risk-reporting system for operational risk.

² "Internationally active bank" means banks operating in more than one jurisdiction or with clients from outside their place of incorporation. This will include almost all banks in the Crown Dependencies.

(b) As part of the bank's internal operational risk assessment system, the bank must systematically track relevant operational risk data including material losses by business line. Its operational risk assessment system must be closely integrated into the risk management processes of the bank. Its output must be an integral part of the process of monitoring and controlling the bank's operational risk profile. For instance, this information must play a prominent role in risk reporting, management reporting, and risk analysis. The bank must have techniques for creating incentives to improve the management of operational risk throughout the firm.

(c) There must be regular reporting of operational risk exposures, including material operational losses, to business unit management, senior management, and to the board of directors. The bank must have procedures for taking appropriate action according to the information within the management reports.

(d) The bank's operational risk management system must be well documented. The bank must have a routine in place for ensuring compliance with a documented set of internal policies, controls and procedures concerning the operational risk management system, which must include policies for the treatment of non-compliance issues.

(e) The bank's operational risk management processes and assessment system must be subject to validation and regular independent review. These reviews must include both the activities of the business units and of the operational risk management function.

(f) The bank's operational risk assessment system (including the internal validation processes) must be subject to regular review by external specialists, auditors, and/or supervisors.

Schedule 3 – Qualifying Criteria – The Alternative Standardised Approach (“ASA”)

Qualifying criteria for all banks wishing to use the ASA

(a) In order to qualify for use of the ASA, a bank must satisfy the Commission that, at a minimum:

- Its board of directors and senior management, as appropriate, are actively involved in the oversight of the operational risk management framework;
- It has an operational risk management system that is conceptually sound and is implemented with integrity; and
- It has sufficient resources in the use of the approach in the major business lines as well as the control and audit areas.

(b) The Commission will have the right to insist on a period of initial monitoring of a bank’s ASA before it is used for regulatory capital purposes.

(c) A bank must develop specific policies and have documented criteria for separately identifying its aggregate mapping of its retail and commercial (loans) business lines from the gross income derived from the six other aggregated business lines book. The criteria must be reviewed and adjusted for new or changing business activities as appropriate. The principles for business line mapping relevant to the ASA are described in *Annex D to Schedule 1*.

The Commission also recommends that banks which are not considered to be internationally active banks should nevertheless have due regard to the additional qualifying criteria stated below. The Commission will consider the additional criteria, taking into account the nature of a bank’s activities, when assessing whether a bank may qualify to adopt the ASA.

Additional qualifying criteria for internationally active banks³

An internationally active bank using the ASA must meet the following additional criteria:

(a) The bank must have an operational risk management system with clear responsibilities assigned to an operational risk management function. The operational risk management function is responsible for developing strategies to identify, assess, monitor and control/mitigate operational risk; for codifying firm-level policies and procedures concerning operational risk management and controls; for the design and implementation of the firm’s operational risk assessment

³ “Internationally active bank” means banks operating in more than one jurisdiction or with clients from outside their place of incorporation. This will include almost all banks in the Crown Dependencies.

methodology; and for the design and implementation of a risk-reporting system for operational risk.

(b) As part of the bank's internal operational risk assessment system, the bank must systematically track relevant operational risk data including material losses by business line. Its operational risk assessment system must be closely integrated into the risk management processes of the bank. Its output must be an integral part of the process of monitoring and controlling the bank's operational risk profile. For instance, this information must play a prominent role in risk reporting, management reporting, and risk analysis. The bank must have techniques for creating incentives to improve the management of operational risk throughout the firm.

(c) There must be regular reporting of operational risk exposures, including material operational losses, to business unit management, senior management, and to the board of directors. The bank must have procedures for taking appropriate action according to the information within the management reports.

(d) The bank's operational risk management system must be well documented. The bank must have a routine in place for ensuring compliance with a documented set of internal policies, controls and procedures concerning the operational risk management system, which must include policies for the treatment of non-compliance issues.

(e) The bank's operational risk management processes and assessment system must be subject to validation and regular independent review. These reviews must include both the activities of the business units and of the operational risk management function.

(f) The bank's operational risk assessment system (including the internal validation processes) must be subject to regular review by external auditors, specialists and/or supervisors.