

**OPERATIONAL RISK****Page no.**

1.	Form BA 400	- Operational risk .....	566
2.	Regulation 33	- Directives and interpretations for completion of <b>six-monthly</b> return concerning operational risk (Form BA 400).....	568
3.	Form BA 410	- Operational risk .....	591
4.	Regulation 34	- Directives and interpretations for completion of <b>annual</b> return concerning operational risk (Form BA 410) .....	594

**OPERATIONAL RISK**

(Confidential and not available for inspection by the public)

Name of bank.....

Six months ended.....(yyyy-mm-dd)

**BA400**

Six monthly

(All amounts to be rounded off to the nearest R'000)

Reconciliation of gross income	Line no.	Financial year	Financial year	Financial year
		-3	-2	-1
		1	2	3
Gross operating income (item 65 of form BA120)	1			
Adjustments <sup>1, 2</sup> (total of items 3 to 9)	2			
Income derived from insurance	3			
Operating expenses, including fees paid by the reporting bank to service providers in respect of outsourcing	4			
Realised profits/losses on sale of securities held in the banking book	5			
Impairment	6			
Extraordinary or irregular items	7			
Adjusted prior period errors	8			
Other adjustments (please specify)	9			
Gross income (item 1 minus item 2)	10			

**1. To the extent that these items are included in item 1 above.****2. Report any relevant expense or other amount to be deducted from gross operating income as a negative amount.**

(All amounts to be rounded off to the nearest R'000)

Required capital and reserve funds	Line no.	Gross income			Loans and advances <sup>1</sup>			Relevant risk exposure	Percentage requirement	Capital requirement
		Financial year -3	Financial year -2	Financial year -1	Year -3	Year -2	Year -1			
		1	2	3	4	5	6			
<b>Basic indicator approach</b>	11							15%		
<b>Standardised approach<sup>1</sup>: gross income derived from-</b> (total of items 13 to 20)	12									
Corporate finance	13							18%		
Trading and sales	14							18%		
Retail brokerage	15							12%		
Commercial banking	16							15%		
Retail banking	17							12%		
Payment and settlement	18							18%		
Agency services	19							15%		
Asset management	20							12%		
<b>Alternative standardised approach<sup>1</sup></b> (total of items 22 to 25)	21									
Commercial banking <sup>1,2</sup>	22							15%		
Retail banking <sup>1,2</sup>	23							12%		
Commercial banking and retail banking <sup>1,3</sup>	24							15%		
Business lines other than commercial banking and retail banking <sup>1,4</sup>	25							18%		
<b>Advanced measurement approach</b>	26									
<b>Capital requirement in respect of operational risk</b> (total of items 11, 12, 21 and 26)	27									
<b>Risk weighted exposure equivalent amount</b>	28									
<b>Memorandum items<sup>5</sup>:</b>									<b>Total</b>	
Total capital requirement in terms of the AMA approach of which:	29								<b>1</b>	
partial use - basic indicator approach	30									
partial use - standardised approach	31									
AMA requirement before insurance and deductions in respect of expected loss of which:	32									
relates to expected loss	33									
Expected loss captured in business practice excluded from capital requirements	34									
Total capital alleviation from insurance	35									
Excess on limit for insurance capital alleviation	36									
AMA due to an allocation mechanism	37									

1. A bank that obtained the approval of the Registrar to apply the alternative standardised approach shall instead of items 13 to 20 complete the relevant items specified in items 22 to 25 below. Refer to the relevant directives specified in regulation 33(8)(c).

2. Refer to regulation 33(8)(c)(ii)(A).

3. Refer to regulation 33(8)(c)(ii)(B).

4. Refer to regulation 33(8)(c)(ii)(C).

5. Relates to advanced measurement approach only.

**33. Operational risk - Directives and interpretations for completion of six-monthly return concerning operational risk (Form BA 400)**

- (1) The content of the relevant return is confidential and not available for inspection by the public.
- (2) The purpose of the return, amongst other things, is-
  - (a) to provide a reconciliation between gross operating income reported in the form BA120 and gross income used by a bank that adopted the basic indicator approach or standardised approach in order to calculate the bank's required amount of capital and reserve funds in respect of operational risk;
  - (b) to calculate a bank's capital requirement in respect of operational risk.
- (3) For the measurement of a bank's exposure to operational risk, the bank shall, at the discretion of the bank, use one of the alternative methodologies specified below.
  - (a) The basic indicator approach prescribed in subregulation (7);
  - (b) Subject to the prior written approval of and such conditions as may be specified in writing by the Registrar, and the bank complying with the relevant minimum qualifying criteria specified in subregulation (8), the standardised or alternative standardised approach;
  - (c) Subject to the prior written approval of and such conditions as may be specified in writing by the Registrar, and the bank complying with the minimum qualifying criteria specified in subregulation (9), the advanced measurement approach.
- (4) Subject to the provisions of subregulations (5) and (6) below, once a bank adopted one of the more sophisticated approaches for the measurement of the bank's exposure to operational risk, the bank shall not revert to a simpler approach without the prior written approval of the Registrar.
- (5) Subject to the prior written approval of and such conditions as may be specified in writing by the Registrar, a bank may use the advanced measurement approach for some parts of its operations and the basic indicator approach or standardised approach for the remainder of its operations, provided that-
  - (a) the bank shall duly capture the operational risk of its global consolidated operations;
  - (b) all the operations of the bank that are included in the advanced measurement approach shall adhere to the relevant qualifying criteria specified in subregulation (9), whilst the relevant parts of the bank's operations that are subject to one of the simpler approaches shall adhere to the qualifying criteria specified in respect of that relevant approach;

- (c) on the date of the implementation of the advanced measurement approach, a significant part of the bank's exposure to operational risk shall be subject to the advanced measurement approach;
- (d) the bank shall submit in writing to the Registrar a comprehensive plan that, amongst other things, shall specify the time period during which the bank intends to roll out the advanced measurement approach across all its operations provided that should the bank plan not to implement the advanced measurement approach across all its operations the bank shall specify and duly motivate in its plan to the Registrar any operation in respect of which the advanced measurement approach will not be implemented, which operation shall constitute an immaterial part of the bank's operations.

(6) When a bank is **unable, unwilling on unprepared** to comply with the qualifying criteria specified for a particular approach in order to measure the bank's exposure to operational risk, the Registrar may in writing direct the bank to apply a different **specified** method for the measurement of the bank's exposure to operational risk, subject to such conditions as may be specified in writing by the Registrar.

(7) *Basic indicator approach*

- (a) A bank that adopted the basic indicator approach shall calculate its required amount of capital and reserve funds in respect of operational risk through the application of the formula specified below, which formula is designed to calculate a capital requirement based on the average amount of the bank's positive annual gross income derived during the preceding three-year period, multiplied by 15 per cent, provided that-
  - (i) when the annual gross income for a particular year was negative or equal to zero, the bank shall exclude the relevant amounts for that particular year from both the numerator and the denominator when the bank calculates the relevant average amount of gross income;
  - (ii) amounts included in the calculation of average gross income shall be the relevant audited amounts in respect of the relevant year. When audited amounts are not available, the bank may with the prior written approval of and subject to such conditions as may be specified in writing by the Registrar use the latest amounts reported by the bank to its board of directors or senior management in respect of the relevant period;
  - (iii) a newly established bank that does not have the required gross income data to calculate the required gross income amounts may with the prior written approval of and subject to such conditions as may be specified in writing by the Registrar use gross income projections for all or part of the said three-year period.

The formula is expressed as follows:

$$K_{\text{BIA}} = [\Sigma(\text{GI}_{1\dots n} \times \alpha)]/n$$

where:

**K<sub>BIA</sub>** is the relevant required amount of capital and reserve funds under the basic indicator approach

**GI** is the relevant annual positive gross income amount derived during the preceding three-year period

**n** is the relevant number of the previous three years in respect of which gross income was positive

**α** is a fixed percentage, equal to 15 per cent

- (b) For the purposes of subregulations (7) and (8), gross income means net interest income plus net non interest income provided that the aforesaid amount of gross income shall not include-
- (i) any provision for loss or impairment raised by the reporting bank;
  - (ii) any operating expenses of the reporting bank, including fees **paid by** the reporting bank to service providers in respect of outsourcing;
  - (iii) any realised profits or losses arising from the sale of securities held in the reporting bank's banking book, including any relevant amounts relating to securities classified as "held to maturity" or "available for sale";
  - (iv) any extraordinary or irregular item;
  - (v) any income derived from insurance.

(8) *Standardised approach and alternative standardised approach*

- (a) A bank that wishes to adopt the standardised approach or alternative standardised approach for the measurement of the bank's exposure to operational risk-
- (i) shall obtain the prior written approval of and comply with such conditions as may be specified in writing by the Registrar, which conditions may include a period of initial monitoring by the Registrar before the bank is allowed to adopt the said approach for the calculation of its capital requirement in respect of operational risk;
  - (ii) as a minimum, shall comply with the relevant qualifying criteria specified in paragraph (b) below;

- (iii) shall divide its activities into the eight business lines specified in table 1 below;
- (iv) shall calculate its capital requirement in accordance with the relevant provisions specified in paragraph (c) below.

(b) *Qualifying criteria*

- (i) As a minimum, a bank that wishes to adopt the standardised approach for the measurement of the bank's exposure to operational risk shall demonstrate to the satisfaction of the Registrar-
  - (A) that the bank's board of directors and senior management are actively involved in the oversight of the bank's operational risk management framework;
  - (B) that the bank's operational risk management system is conceptually sound and implemented with integrity;
  - (C) that the bank has sufficient resources for the use of the standardised approach in the bank's major business lines, and in the bank's control and audit units;
  - (D) that the bank has in place adequate policies and documented criteria to map its business lines and gross income into the business lines indicated in table 1 below, in accordance with the requirements specified in paragraph (d) below.
- (ii) As a minimum, in addition to the requirements specified in subparagraph (i) above, a bank with internationally active branches or subsidiaries, which bank wishes to adopt the standardised approach for the measurement of the bank's exposure to operational risk-
  - (A) shall have in place an adequate operational risk management system with clear responsibilities being assigned to an operational risk management function, which operational risk management function, amongst other things, shall be responsible for-
    - (i) the development of strategies to identify, assess, monitor and control or mitigate the bank's exposure to operational risk;
    - (ii) the development of comprehensive policies and procedures relating to operational risk management and controls, including policies to address areas of non-compliance;

- (iii) the design and implementation of a methodology to comprehensively assess the bank's exposure to operational risk;
  - (iv) the design and implementation of a risk reporting system in respect of operational risk;
  - (v) the development and implementation of techniques to create appropriate incentives to improve the management and control of operational risk throughout the bank.
- (B) shall as part of the bank's internal operational risk assessment system track relevant operational risk data, including material losses per business line-
- (i) which operational risk assessment system-
    - (aa) shall closely be integrated with the risk management processes of the bank;
    - (bb) shall be subject to regular validation and independent review;
  - (ii) the output of which system shall form an integral part of the process to monitor and control the bank's operational risk profile, including any risk reporting, management reporting and risk analysis;
- (C) shall on a regular basis report to the relevant management of the bank's business units, the senior management of the bank and the bank's board of directors its exposure to operational risk, including material losses suffered in respect of operational risk;
- (D) shall duly document the bank's operational risk management system;
- (E) shall have in place-
- (i) procedures to take appropriate action based on information contained in the reports submitted to the management of the bank's business units, the senior management of the bank and the bank's board of directors;
  - (ii) a robust process to ensure compliance with the bank's documented set of internal policies, controls and procedures concerning the operational risk management system;

(iii) policies that comprehensively deal with the manner in which any area or matter of non-compliance will be dealt with;

(F) shall ensure that the bank's operational risk management process is subject to regular independent review.

(c) *Capital requirement*

(i) Subject to the provisions of subparagraph (ii) below, a bank shall separately calculate a capital requirement in respect of each relevant business line specified in table 1 below by multiplying the three-year average amount of gross income relating to each relevant business line with the beta factor specified in table 1 below, provided that the requirements and conditions specified in subregulation (7) relating to gross income, and in particular any relevant negative amount of gross income, to the extent that the said requirements and conditions are relevant, shall *mutatis mutandis* apply to each relevant business line specified in table 1 below.

In the absence of any negative amount of gross income in any of the relevant business lines during any of the relevant three years, the relevant capital requirement for the bank may be calculated through the application of the formula specified below.

$$K_{TSA} = \{\sum_{\text{years } 1-3} \max[\sum(GI_{1-8} \times \beta_{1-8}), 0]\} / 3$$

where:

**K<sub>TSA</sub>** is the aggregate required amount of capital in terms of the standardised approach

**GI<sub>1-8</sub>** is the annual gross income amount in a specific year, as defined in and calculated in accordance with the conditions and requirements relating to gross income specified in subregulation (7) above, in respect of each of the relevant eight business lines

**β<sub>1-8</sub>** is the relevant beta factor specified in table 1 below

Table 1

<b>Standardised approach</b>			
<b>Business line</b>	<b>Consisting of:</b>	<b>Activities which may be included</b>	<b>Beta factor</b>
Corporate finance	Corporate finance	Mergers and acquisitions, underwriting, privatisations, securitisation, research, debt (government or high yield), equity, syndications, IPO, secondary private placements	18%
	Municipal/ Government finance		
	Merchant banking		
	Advisory services		
Trading and sales	Sales	Fixed income, equity, foreign exchanges, commodities, credit, funding, own position securities, lending and repurchase/ resale agreements, brokerage, debt, prime brokerage	18%
	Market making		
	Proprietary positions		
	Treasury		
Retail banking	Retail banking	Retail lending and deposits, banking services, trust and estates	12%
	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	15%
Payment and settlement	External clients	Payments and collections, funds transfer, clearing and settlement	18%
Agency services	Custody	Escrow, depository receipts, securities lending (customers) corporate actions	15%
	Corporate agency	Issuer and paying agents	
	Corporate trust		
Asset management	Discretionary fund management	Pooled, segregated, retail, institutional, closed, open, private equity	12%
	Non-discretionary fund management	Pooled, segregated, retail, institutional, closed, open	
Retail brokerage	Retail brokerage	Execution and full service	12%

(ii) Subject to the prior written approval of and such conditions as may be specified in writing by the Registrar, which approval shall be granted only in exceptional cases, a bank may use an alternative standardised approach to calculate the bank's capital requirement relating to operational risk, in terms of which alternative standardised approach the bank-

(A) may in respect of its retail banking and commercial banking business lines, instead of the gross income, multiply the loans and advances of the said business lines with the respective beta factors specified in table 1 in subparagraph (i) above and a constant factor "m" in accordance with the formula specified below.

(i) In the case of the bank's retail banking business line, as follows:

$$K_{RB} = \beta_{RB} \times m \times LA_{RB}$$

where:

**K<sub>RB</sub>** is the relevant capital requirement in respect of the retail banking business line

**β<sub>RB</sub>** is the relevant beta factor for the retail banking business line, as specified in table 1, in paragraph (i) above

**LA<sub>RB</sub>** is the total outstanding amount of specified retail loans and advances, which total amount-

(aa) shall not be risk weighted;

(bb) shall be gross of any provision;

(cc) shall be derived by calculating the relevant average amount based on the relevant total outstanding amount at the end of each year in the three year period preceding the reporting date;

(dd) shall include the total drawn amount in respect of the credit portfolios specified below:

(i) retail;

(ii) SMEs treated as retail;

(iii) purchased retail receivables

**m** is a constant factor equal to 0.035

- (ii) In the case of the bank's commercial banking business line, as follows:

$$K_{CB} = \beta_{CB} \times m \times LA_{CB}$$

where:

**K<sub>CB</sub>** is the relevant capital requirement in respect of the commercial banking business line

**β<sub>CB</sub>** is the relevant beta factor for the commercial banking business line, as specified in table 1, in paragraph (i) above

**LA<sub>CB</sub>** is the total outstanding amount of specified commercial loans and advances, which total amount-

- (aa) shall not be risk weighted;
- (bb) shall be gross of any provision;
- (cc) shall be derived by calculating the relevant average amount based on the relevant total outstanding amount at the end of each year in the three year period preceding the reporting date;
- (dd) shall include the book value of securities held in the bank's banking book;
- (ee) shall include the total drawn amount in respect of the credit portfolios specified below:
  - (i) corporate;
  - (ii) sovereign;
  - (iii) bank;
  - (iv) specialised lending;
  - (v) SMEs treated as corporate exposure;
  - (vi) purchased corporate receivables;

**m** is a constant factor equal to 0.035

- (B) may aggregate the retail and commercial banking business lines and apply to the said aggregated amount a beta factor of 15 per cent instead of the percentages specified in table 1 in subparagraph (i) above;

- (C) may aggregate the gross income of the business lines other than the retail and commercial banking business lines and apply to the said aggregated amount a beta factor of 18 per cent instead of the percentages specified in table 1 in subparagraph (i) above;
  - (D) shall in the calculation of average amounts comply with the relevant requirements relating to negative or zero amounts, specified in subregulation (7) above.
- (iii) The bank's total capital requirement in terms of the standardised approach and alternative standardised approach shall be equal to the sum of the respective capital requirements calculated in accordance with the relevant requirements specified in this paragraph (c).

(d) *Mapping of business lines*

A bank that adopted the standardised approach for the measurement of the bank's exposure to operational risk-

- (i) shall have in place a board approved policy compiled by the senior management of the bank for the mapping of the bank's business lines in accordance with the relevant requirements specified in this subregulation (8);
- (ii) shall in a mutually exclusive and jointly exhaustive manner map all its activities into one of the eight business lines specified in table 1 in paragraph (c) above, provided that-
  - (A) the said process to map activities into business lines for purposes of this subregulation (8) shall be consistent with the definitions of business lines applied by the bank for the calculation of the bank's required amount of capital and reserve funds in respect of other categories of risk, such as credit risk and market risk;
  - (B) any banking or trading activity of the reporting bank which cannot readily be mapped into the business line framework specified in table 1, but which activity represents an ancillary function to an activity specified in table 1, shall be allocated to the business line that it supports;
  - (C) when the bank maps gross income into one of the eight business lines specified in table 1 and the bank is unable to map a particular activity into a specific business line, and the activity does not represent an ancillary function to an activity specified in table 1, as envisaged in item (B), the bank shall allocate the said particular activity to the business line with the highest capital requirement;

- (iii) may use its internal pricing method to allocate gross income between the business lines specified in table 1, provided that the aggregate amount of gross income relating to the eight business lines specified in table 1 shall be equal to the relevant aggregate amount of gross income for the reporting bank;
- (iv) shall duly document its mapping process, including the relevant definitions that were applied in the mapping process, which documentation-
  - (A) shall duly motivate any exceptions or overrides that took place during the mapping process;
  - (B) amongst other things, shall contain business line definitions sufficiently clear to allow a third party to replicate the bank's process of business line mapping;
- (v) shall have in place a sufficiently robust process to define the mapping of any new activities or products;
- (vi) shall ensure that the bank's mapping process to business lines is subject to adequate internal controls and appropriate internal audit coverage, including independent review.

(9) *Advanced measurement approach*

- (a) A bank that wishes to adopt the advanced measurement approach for the calculation of the bank's capital requirement relating to operational risk in terms of the bank's internal risk measurement system-
  - (i) shall obtain the prior written approval of the Registrar;
  - (ii) shall at all times adhere to such conditions as may be specified in writing by the Registrar, which conditions may include a period of initial monitoring by the Registrar before the bank is allowed to adopt the said approach for the calculation of its capital requirement in respect of operational risk;
  - (iii) as a minimum, shall comply with the qualifying criteria specified in paragraph (d) below;
  - (iv) shall calculate its capital requirement relating to operational risk in accordance with the relevant provisions of paragraphs (e) and (f) below.
- (b) An application for the written approval of the Registrar shall be accompanied by a written statement containing adequate details in respect of, amongst other things, the bank's compliance with the quantitative and qualitative requirements specified in paragraph (d) below.

- (c) When a bank wishes to apply an allocation mechanism in order to determine the capital requirements relating to operational risk for the bank's internationally active subsidiaries, the bank shall include in its application to the Registrar sufficient details, including details relating to the empirical process to calculate the capital requirements of the said subsidiaries, in order for the Registrar to determine the significance and the risk profile of the said subsidiaries.
- (d) *Qualifying criteria*
- (i) As a minimum, a bank that wishes to adopt the advanced measurement approach for the calculation of the bank's capital requirement in respect of operational risk shall demonstrate to the satisfaction of the Registrar-
- (A) that the bank's board of directors and senior management are actively involved in the oversight of the bank's operational risk management framework;
  - (B) that the bank's operational risk management system is conceptually sound and implemented with integrity;
  - (C) that the bank has sufficient resources for the use of the approach in the bank's major business lines, and in the bank's control and audit units;
  - (D) that the bank's internal measurement system is able to reasonably estimate unexpected losses based on the combined use of-
    - (i) internal loss data;
    - (ii) relevant external loss data;
    - (iii) scenario analysis;
    - (iv) the bank's internal control factors and the business environment in which the bank operates;
  - (E) that the bank's measurement system is capable of supporting the allocation of economic capital for operational risk across business lines in such a manner that incentives are created to improve the risk management capabilities in each relevant business line;
  - (F) that the bank complies with the qualitative and quantitative standards specified below.

(ii) *Qualitative standards*

A bank that wishes to adopt the advanced measurement approach for the calculation of the bank's capital requirement relating to operational risk shall comply with the qualitative requirements specified in regulation 39(15).

(iii) *Quantitative standards*

As a minimum, a bank that wishes to adopt the advanced measurement approach for the calculation of the bank's capital requirement relating to operational risk-

- (A) shall have in place a duly documented and robust approach for the measurement of the bank's exposure to operational risk, which approach, amongst other things, shall ensure that the bank has in place rigorous procedures for the development of a robust operational risk model;
- (B) shall have in place a robust operational risk measurement system, which operational risk measurement system-
  - (i) shall be consistent with the scope of operational risk, as defined in regulation 67;
  - (ii) shall be consistent with the loss event types specified in subparagraph (iv) below;
  - (iii) shall duly capture potentially severe 'tail' loss events;
  - (iv) shall be subject to independent validation;
  - (v) shall be sufficiently granular to capture the major drivers of operational risk, which drivers may affect the shape of the tail of the bank's estimates of loss;
  - (vi) shall not double count the effects of correlation or risk mitigation;
  - (vii) shall comply with the minimum requirements relating to-
    - (aa) internal data specified in subparagraph (v) below;
    - (bb) relevant external data specified in subparagraph (vi) below;
    - (cc) scenario analysis specified in subparagraph (vii) below;
    - (dd) internal control systems and the factors reflecting the business environment in which the bank conducts business, specified in subparagraph (viii) below;

## (iv) Loss event types

Category relating to event type (Level 1)	Definition	Category relating to activity (Level 2)	Examples of activities include: (Level 3)
Internal fraud	Losses due to acts of a type intended to defraud, misappropriate property or circumvent regulations, the law or company policy, excluding diversity/discrimination events, which acts involve at least one internal party	Unauthorised activity	Transactions intentionally not reported Unauthorised transaction with monetary loss Intentional misrepresentation of position
		Theft and fraud	Fraud / credit fraud / worthless deposits Theft / extortion / embezzlement / robbery Misappropriation of assets Malicious destruction of assets Forgery Cheque kiting Smuggling Account take-over / impersonation / etc. Tax non-compliance / wilful evasion Bribes / kickbacks Insider trading (not on bank/ firm's account)
External fraud	Losses due to acts of a type intended to defraud, misappropriate property or circumvent the law, by a third party	Theft and fraud	Theft/ robbery Forgery Cheque kiting
		Systems security	Hacking damage Theft of information with monetary loss
Employment practices and workplace safety	Losses arising from acts inconsistent with employment, health or safety laws or agreements, from payment of personal injury claims, or from diversity / discrimination events	Employee relations	Compensation, benefit, termination issues Organised labour activity
		Safe environment	General liability such as slip and fall Employee health & safety rules events Workers compensation
		Diversity and discrimination	All discrimination types

Category relating to event type (Level 1)	Definition	Category relating to activity (Level 2)	Examples of activities include: (Level 3)
Clients, products and business practices	Losses arising from an unintentional or negligent failure to meet a professional obligation to specific clients (including fiduciary and suitability requirements), or from the nature or design of a product.	Suitability, disclosure and fiduciary	Fiduciary breaches / guideline violations Suitability / disclosure issues (KYC, etc.) Retail customer disclosure violations Breach of privacy Aggressive sales Account churning Abuse of confidential information Lender liability
		Improper business or market practices	Antitrust Improper trade / market practices Market manipulation Insider trading (on bank/ firm's account) Unlicensed activity Money laundering
		Product flaws	Product defects (unauthorised, etc.) Model errors
		Selection, sponsorship and exposure	Failure to investigate client per guidelines Exceeding client exposure limits
		Advisory activities	Disputes over performance of advisory activities
Damage to physical assets	Losses arising from loss or damage to physical assets from natural disaster or other events.	Disasters and other events	Natural disaster losses Human losses from external sources (terrorism, vandalism)
Business disruption and system failures	Losses arising from disruption of business or system failures	Systems	Hardware Software Telecommunications Utility outage / disruptions

Category relating to event type (Level 1)	Definition	Category relating to activity (Level 2)	Examples of activities include: (Level 3)
Execution, delivery and process management	Losses from failed transaction processing or process management, from relations with trade counterparties and vendors	Transaction capture, execution and maintenance	Miscommunication Data entry, maintenance or loading error Missed deadline or responsibility Model / system failure Accounting error / entity attribution error Other task malfunctioning Delivery failure Collateral management failure Reference data maintenance
		Monitoring and reporting	Failed mandatory reporting obligation Inaccurate external report (loss incurred)
		Customer intake and documentation	Client permissions / disclaimers missing Legal documents missing / incomplete
		Customer / client account management	Unapproved access given to accounts Incorrect client records (loss incurred) Negligent loss or damage of client assets
		Trade counterparties	Non-client counterparty misperformance Misc. non-client counterparty disputes
		Vendors and suppliers	Outsourcing Vendor disputes

## (v) Internal data

As a minimum-

## (A) a bank shall duly capture internal loss data-

- (i) in order for the bank, amongst other things, to validate or compare its risk estimates with the bank's actual experience of loss;
- (ii) which loss data shall clearly be linked to the bank's business activities, technological processes and risk management procedures;

## (B) a bank's internal processes relating to the collection of loss data-

- (i) shall be adequate to map the bank's historical internal loss data into the relevant level 1 categories specified in subparagraph (iv) above, which level 1 categories relate to loss event types;
- (ii) shall be duly documented, which documentation, amongst other things-
  - (aa) shall include objective criteria for the allocation of losses to the relevant business lines specified in table 1, in subregulation (8)(c)(i), and the specified loss event types;
  - (bb) shall duly specify the relevant criteria to be applied when assigning loss data arising from an event in a centralised function, such as an information technology department, or an activity that spans more than one business line, as well as from related events over time;
- (iii) shall be sufficiently robust-
  - (aa) to ensure that the bank's internal loss data is comprehensive in the sense that the bank's internal process captures all material activities and exposures from all appropriate sub-systems and geographic locations;
  - (bb) to capture adequate information in respect of-
    - (i) the gross loss amounts;
    - (ii) the date of the loss event;

- (iii) any recovery of gross loss amounts;
  - (iv) descriptive information relating to the drivers or causes of the loss event;
- (iv) shall include an appropriate *de minimis* gross loss threshold amount for the collection of internal loss data provided that in order to ensure broadly consistent data collection between banks that adopted the advanced measurement approach for the calculation of their respective capital requirements relating to operational risk the Registrar may from time to time specify a minimum gross loss threshold amount;
- (C) a bank shall have in place duly documented procedures in order to assess the ongoing relevance of historical data, which documented procedures shall duly specify the situations in which judgement, scaling or other adjustments to internal loss data may be used, including the extent to which such judgement may be used and the officials who are authorised to make such decisions;
- (D) when a bank's capital requirement in respect of operational risk is based on internal loss data, the said capital requirement shall be based on a minimum observation period of-
- (i) five years of data; or
  - (ii) when the bank originally adopts the advanced measurement approach, subject to such conditions as may be specified in writing by the Registrar, a minimum observation period of less than five years of data, but in no case less than three years of data,
- irrespective whether the internal loss data is used to calculate or validate the bank's measure of loss.
- (vi) External data
- As a minimum-
- (A) a bank shall have in place board approved policies and procedures in order to determine-
- (i) the circumstances under which external data such as public data and/or pooled industry data should be used in addition to internal data;

- (ii) the methodologies that should be used in order to incorporate the relevant external data, such as scaling or qualitative adjustments, provided that the bank's operational risk measurement system shall incorporate relevant external data when there is reason to believe that the bank is exposed to infrequent, yet potentially severe, losses.
- (B) the external data referred to in item (A) above shall include information in respect of-
  - (i) the actual loss amounts;
  - (ii) the scale of business operations where the loss event occurred;
  - (iii) the causes of and circumstances surrounding the loss event;
  - (iv) any other information that would assist the bank in assessing the relevance of the loss event and/or data;
- (C) a bank's policies and procedures relating to the use of external data shall be subject to regular independent review and appropriate internal audit coverage.

(vii) Scenario analysis

As a minimum, a bank-

- (A) shall use scenario analysis in conjunction with external data in order to evaluate-
  - (i) the bank's exposure to high-severity events;
  - (ii) the impact of deviations from the correlation assumptions embedded in the bank's operational risk measurement framework;
  - (iii) potential losses which may arise from multiple simultaneous operational risk loss events;
- (B) shall have adequately skilled staff-
  - (i) to conduct the scenario analysis;
  - (ii) to derive reasoned assessments of plausible severe losses;

- (C) shall over time, in order to ensure the reasonableness of its risk measures and assessments, validate and re-assess the said assessments of plausible severe losses generated through scenario analysis through comparison to actual loss experience.

(viii) Business environment and internal control factors

As a minimum-

- (A) a bank's operational risk assessment methodology shall be sufficiently robust to capture key business environment and internal control factors that may have an impact on the bank's operational risk profile, which factors-
  - (i) shall be a meaningful driver of risk based on the experience and involving the expert judgment of the affected business areas;
  - (ii) as far as possible, shall be translatable into quantitative measures that lend themselves to verification;
- (B) a bank's estimates in respect of operational risk shall be sufficiently sensitive to changes in the factors referred to in item (A) above;
- (C) the relative weightings of the various factors referred to in item (A) above shall be appropriate, that is, the bank's risk framework shall be able to capture potential increases in risk due to greater complexity of activities or increased business volume, or changes in risk due to improvements in risk controls;
- (D) a bank's operational risk framework and each instance of its application-
  - (i) shall be duly documented and subject to independent review;
  - (ii) shall be validated through comparison to actual internal loss experience and relevant external data.
- (e) The capital requirement of a bank that adopted the advanced measurement approach for the measurement of the bank's exposure to operational risk-
  - (i) shall be equal to the sum of the bank's expected loss amounts and unexpected loss amounts, unless the bank can demonstrate to the satisfaction of the Registrar that the bank duly measures and accounts for expected losses;

- (ii) shall be equal to the aggregate amount of the bank's risk measures for the different operational risk estimates, provided that, subject to the prior written approval of and such conditions as may be specified in writing by the Registrar, the bank may use internally determined correlations in respect of operational risk losses across individual operational risk estimates, provided that-
  - (A) the bank's systems-
    - (i) shall duly take into account uncertainty in respect of correlation estimates;
    - (ii) shall be subject to sufficiently robust stress testing.
  - (B) the bank shall validate its correlation assumptions by making use of appropriate quantitative and qualitative techniques.
- (iii) shall be the amount after the bank has taken into account the effect of eligible risk mitigation, that is, in order to take into account the effect of risk mitigation in respect of operational risk the bank shall comply with the relevant requirements relating to risk mitigation specified in paragraph (f) below.

(f) *Eligible risk mitigation*

A bank that adopted the advanced measurement approach for the calculation of the bank's capital requirement relating to operational risk may recognise the risk mitigating impact of insurance, provided that-

- (i) the insurance provider-
  - (A) shall have a minimum rating of A, or the equivalent thereof, in respect of its ability to pay claims;
  - (B) shall be independent from the reporting bank, that is, a third party entity or institution, provided that when a bank obtains insurance through captives or affiliates the bank shall lay off its risk exposure to an independent third-party entity or institution, for example, through re-insurance, provided that the entity or institution that provides the re-insurance shall comply with the eligibility criteria specified in this paragraph (f);

- (ii) the insurance policy-
  - (A) shall have an initial term of no less than one year, provided that when an insurance policy has a residual term of less than one year the bank shall make provision for appropriate haircuts that reflect the declining residual term of the policy, which haircut shall be equal to 100 per cent in respect of policies with a residual term of 90 days or less;
  - (B) shall have a minimum notice period for cancellation of 90 days;
  - (C) shall not contain any exclusions or limitations triggered by supervisory actions or, in the case of a failed bank, that preclude the bank, receiver or liquidator from recovering for damages suffered or expenses incurred by the bank, except when an event occurs after the initiation of receivership or liquidation proceedings in respect of the bank, provided that the insurance policy may exclude any fine, penalty or punitive damages resulting from supervisory actions.
- (iii) the bank's calculations relating to risk mitigation-
  - (A) shall duly reflect the bank's insurance coverage;
  - (B) shall be consistent with the actual likelihood and impact of loss used in the bank's overall determination of its operational risk capital;
- (iv) the bank's framework for the recognition of insurance shall be duly documented;
- (v) the bank shall adequately disclose its use of insurance for operational risk mitigation purposes;
- (vi) by way of appropriate discounts or haircuts, the bank's methodology for the recognition of insurance shall duly capture-
  - (A) the insurance policy's cancellation terms and residual term;
  - (B) any uncertainty of payment;
  - (C) any mismatches in protection;
- (vii) the bank's recognition of operational risk mitigation through insurance shall be limited to 20 per cent of the bank's total capital requirement in respect of operational risk, calculated in terms of the advanced measurement approach.

(10) Instructions relating to the completion of the return are furnished with reference to certain item descriptions and line item numbers appearing on the form BA 400, as follows:

**Line item  
number**

8 Adjusted prior period errors

In respect of any relevant item affecting gross income, this item shall reflect the aggregate amount of errors, omissions or misstatement of amounts in respect of a reporting period preceding the current reporting period.

11 Based on the relevant requirements specified in subregulation (7) the reporting bank shall calculate its relevant required amount of capital and reserve funds in terms of the basic indicator approach.

12 to 20 Based on the relevant requirements specified in subregulation (8) the reporting bank shall calculate its relevant required amount of capital and reserve funds in terms of the standardised approach.

21 to 25 Based on the relevant requirements specified in subregulation (8)(c)(ii) the reporting bank shall calculate its relevant required amount of capital and reserve funds in terms of the alternative standardised approach.

26 and 29 to 37 Based on the relevant requirements specified in subregulation (9) the reporting bank shall, amongst other things, calculate its relevant required amount of capital and reserve funds in terms of the advanced measurement approach.

28 A bank shall convert its required amount of capital and reserve funds for operational risk reported in item 27 to the required risk weighted asset equivalent amount through the application of the formula specified below.

$$RWE = K \times 12,5$$

where:

**RWE** is the required risk weighted asset equivalent amount

**K** is the required amount of capital and reserve funds for operational risk reported in item 27.

**Columns relating to items 11 to 25**

7 Based on the relevant requirements specified in subregulations (7) and (8), this column 7 shall reflect the relevant risk exposure amount.

**OPERATIONAL RISK**

(Confidential and not available for inspection by the public)

Name of bank.....

Financial year ended.....(yyyy-mm-dd)

BA410

Annually

(All amounts to be rounded off to the nearest R'000)

Advanced measurement approach  Selected information relating to loss events	Line no.	Event type						Total (of col. 1 to 7)	Loss event as % of gross income	Memorandum: threshold applied i.r.o data collection <sup>1</sup>		
		Internal fraud	External fraud	Employment practices and workplace safety	Client, products and business practices	Damage to physical assets	Business disruption and system failures			Execution, delivery and process management	Lowest	Highest
		1	2	3	4	5	6			7	8	9
<b>Corporate finance</b>												
Number of events <sup>2</sup>	1											
Gross loss amount <sup>3</sup>	2											
Total recoveries <sup>4</sup>	3											
Current financial year	4											
Prior financial years	5											
Net loss amount <sup>5</sup>	6											
Maximum single loss <sup>6</sup>	7											
<b>Trading and sales</b>												
Number of events <sup>2</sup>	8											
Gross loss amount <sup>3</sup>	9											
Total recoveries <sup>4</sup>	10											
Current financial year	11											
Prior financial years	12											
Net loss amount <sup>5</sup>	13											
Maximum single loss <sup>6</sup>	14											
<b>Retail brokerage</b>												
Number of events <sup>2</sup>	15											
Gross loss amount <sup>3</sup>	16											
Total recoveries <sup>4</sup>	17											
Current financial year	18											
Prior financial years	19											
Net loss amount <sup>5</sup>	20											
Maximum single loss <sup>6</sup>	21											
<b>Commercial banking</b>												
Number of events <sup>2</sup>	22											
Gross loss amount <sup>3</sup>	23											
Total recoveries <sup>4</sup>	24											
Current financial year	25											
Prior financial years	26											
Net loss amount <sup>5</sup>	27											
Maximum single loss <sup>6</sup>	28											

(All amounts to be rounded off to the nearest R'000)

Advanced measurement approach Selected information relating to loss events	Line no.	Event type						Total (of col. 1 to 7)	Loss event as % of gross income	Memorandum: threshold applied i.r.o data collection <sup>1</sup>		
		Internal fraud	External fraud	Employment practices and workplace safety	Client, products and business practices	Damage to physical assets	Business disruption and system failures			Execution, delivery and process management	Lowest	Highest
		1	2	3	4	5	6			7	8	9
<b>Retail banking</b>												
Number of events <sup>2</sup>	29											
Gross loss amount <sup>3</sup>	30											
Total recoveries <sup>4</sup>	31											
Current financial year	32											
Prior financial years	33											
Net loss amount <sup>5</sup>	34											
Maximum single loss <sup>6</sup>	35											
<b>Payment and settlement</b>												
Number of events <sup>2</sup>	36											
Gross loss amount <sup>3</sup>	37											
Total recoveries <sup>4</sup>	38											
Current financial year	39											
Prior financial years	40											
Net loss amount <sup>5</sup>	41											
Maximum single loss <sup>6</sup>	42											
<b>Agency services</b>												
Number of events <sup>2</sup>	43											
Gross loss amount <sup>3</sup>	44											
Total recoveries <sup>4</sup>	45											
Current financial year	46											
Prior financial years	47											
Net loss amount <sup>5</sup>	48											
Maximum single loss <sup>6</sup>	49											
<b>Asset management</b>												
Number of events <sup>2</sup>	50											
Gross loss amount <sup>3</sup>	51											
Total recoveries <sup>4</sup>	52											
Current financial year	53											
Prior financial years	54											
Net loss amount <sup>5</sup>	55											
Maximum single loss <sup>6</sup>	56											
<b>Total i.r.o event types</b>												
Number of events <sup>2</sup>	57											
Gross loss amount <sup>3</sup>	58											
Total recoveries <sup>4</sup>	59											
Current financial year	60											
Prior financial years	61											
Net loss amount <sup>5</sup>	62											
Maximum single loss <sup>6</sup>	63											

1. Means the relevant gross loss threshold amount specified by the bank for data collection.
2. Means the total number of occurrences of the particular event during the relevant financial year.
3. Means the total loss amount before any recoveries are taken into consideration.
4. Include an amount recovered in terms of insurance.
5. Means gross loss amount less total recoveries in the current financial year.
6. Means the largest individual gross loss amount incurred during the relevant financial year.

(All amounts to be rounded off to the nearest R'000)

Selected information relating to recorded losses <sup>1</sup>	Line no.	Internal code <sup>2</sup>	Entity code where event took place <sup>2</sup>	Gross loss amount	Total loss recovered (col. 5 plus 6)	Loss mitigation/recovered		Risk event type <sup>2,3</sup>	Dates (yyyy/mm/dd)			
						Insurance	Other		Event	Recognition	1 <sup>st</sup> payment from risk transfer mechanism	Latest payment from risk transfer mechanism
						5	6		8	9	10	11
Total <sup>2</sup>	64											
	65											
	66											
	67											
	68											
	69											
	70											
	71											
	72											
	73											
	74											
	75											

Selected information relating to recorded losses <sup>1</sup>	Line no.	Breakdown of gross loss (%) per business line								Status: ended (Y/N)	Comment <sup>2</sup>
		Corporate finance	Trading and sales	Retail brokerage	Commercial banking	Retail banking	Payment and settlement	Agency services	Asset management		
		12	13	14	15	16	17	18	19		
Total <sup>2</sup>	64										
	65										
	66										
	67										
	68										
	69										
	70										
	71										
	72										
	73										
	74										
	75										

1. Relates to gross losses recorded during the relevant financial year, which loss events may still be open.

2. Please provide relevant required detail and additional comment on a separate list.

3. Based on the following specified keys: 1 = internal fraud; 2 = external fraud; 3 = employment practices and workplace safety; 4 = clients, products and business practices; 5 = damage to physical assets; 6 = business disruption and system failure; 7 = execution, delivery and process management

### 34. Operational risk - Directives and interpretations for completion of annual return concerning operational risk (Form BA 410)

(1) The content of the relevant return is confidential and not available for inspection by the public.

(2) The purpose of the return is to obtain from a bank that adopted the advanced measurement approach for the calculation of its required amount of capital and reserve funds in respect of operational risk selected information in respect of, amongst other things, the bank's loss event types, recorded losses and recovery of loss, which information is based on specified business lines and specified loss event types.

(3) Instructions relating to the completion of the return are furnished with reference to certain item descriptions and line item numbers appearing on the form BA 410, as follows:

***Line item  
number***

1 to 75 Based on the relevant requirements specified in regulation 33(9) a bank that adopted the advanced measurement approach for the calculation of the bank's required amount of capital and reserve funds relating to operational risk shall complete items 1 to 75.

2, 9, 16, 23, 30, 37, 44, 51, 58 The **gross loss amount** shall include any expenses incurred by the reporting bank in relation to the loss event but not any amount in respect of an investment programme, an opportunity cost amount, an amount relating to revenue forgone or any amount constituting a gain. For example, when a computer related fault results in a break in business activity and market rates move against the bank during the period that the fault continues the gross loss amount shall include any loss arising from a subsequent unwinding of the position, any related amount paid to a client, any cost relating to a consultant specifically engaged to resolve the problem and any related amount paid in respect of overtime. However, when the bank decides to invest in hardware in order to prevent a similar situation, the amount in respect of the said investment in hardware shall not be included into the gross loss amount.

4, 11, 18, 25, 32 39, 46, 53, 60 These items shall reflect the aggregate amount of insurance recoveries and any other relevant recoveries received by the reporting bank in the current financial year.

In order to ensure an accurate measure of recovery rates the reporting bank shall not net off an amount related to a recovery against the relevant gross loss amount but shall instead separately capture the said recovery amount.

For the purposes of this regulation 34 a recovery means an independent occurrence that is separate from the original event and in terms of which funds are recovered by or contributed to the reporting bank, which funds are usually received from or by a third party.

When the recovery in respect of an event exceeds the amount initially written off, a gain would be derived in respect of the reported event.

5, 12, 19, 26, 33 These items shall reflect the aggregate amount of insurance recoveries and any  
40, 47, 54, 61 other relevant recoveries received by the reporting bank in the current financial year in respect of losses recorded in previous financial years.

### Columns relating to items 1 to 63

9 In respect of the specified items a bank shall report in column 9 the relevant amount reported in column 8 expressed as a percentage of gross income, as defined in regulation 33(7)(b), derived during the preceding financial year for the relevant business line, which percentage shall be rounded to two decimal places.

10 and 11 A bank shall report in column 10 the relevant *de minimis* gross loss threshold amount specified by the bank for the collection of internal loss data, as envisaged in regulation 33(9)(d)(v)(B)(iv), which *de minimis* gross loss threshold amount shall be subject to the minimum amount that may be specified by the Registrar from time to time in order to ensure broadly consistent data collection between banks that adopted the advanced measurement approach for the calculation of their respective capital requirements relating to operational risk, provided that when the bank specified different threshold amounts within a specified business line the bank shall report in column 11 the highest threshold amount specified in respect of the relevant business line.

### Columns relating to items 64 to 75

1 to 21 In respect of the specific recorded loss event identified in column 1, which loss event was incurred in the financial year to which the reporting period relates, and in respect of which loss event the recorded gross loss amount exceeds the relevant threshold amount specified by the bank or Registrar, a bank shall report in columns 2 to 21 the relevant required information.

- 3 This column shall reflect the aggregate amount of gross loss arising from the loss event types specified in regulation 33(9)(d)(iv), that is, from internal fraud, external fraud, employment practices and workplace safety, clients and products and business practices, damage to physical assets, business disruption and system failure, and execution, delivery and process management.
- 5 and 6 These columns shall respectively reflect the aggregate amounts in respect of losses recovered from insurance or other third parties, which recovery may be direct or indirect.
- An indirect recovery relates to a recovery paid for in advance, such as a recovery of loss through an insurance contract, whereas a direct recovery relates to a recovery of loss that is obtained without the aforesaid payment in advance.
- Normally the respective categories of recovery focus on where or how the relevant funds were obtained, and, for example, may include-
- (a) asset seizure/ collateral, that is, the proceeds are derived from the liquidation of assets or collateral;
  - (b) contractual recovery, that is, payment is received from a third party service provider or vendor in terms of a contractual agreement or arrangement;
  - (c) client recovery, that is, payment is received from a client or employee;
  - (d) interest earned, that is, interest is earned on failed settlement or another operational event that results in a subsequent liability of a client or other third party;
  - (e) legal judgement, that is, payment is received in terms of a court order or judgement in favour of the reporting bank;
  - (f) insurance recovery, that is, payment is received in terms of an insurance policy, including any recovery of an amount from an insurance subsidiary or captive insurance entity.
- 8 This column shall reflect the relevant event date, that is, the date on which the relevant loss event occurred or commenced.

- 10 This column shall reflect the relevant date on which the bank first received payment as compensation for the relevant loss event, which payment may have been received from an insurance company.
- 11 This column shall reflect the most recent date on which the bank received payment as compensation for the relevant loss event, which payment may have been received from an insurance company.
- 12 to 19 In respect of the specified business lines these columns shall reflect the percentage breakdown of the relevant incurred gross loss amount reported in column 3.
- 20 For the purposes of these Regulations an event shall be deemed to have ended or be closed when all avenues of recovery have been exhausted and/or when the relevant reporting bank decides not to further ensue recovery.